



AEI20

**Digital Camera
User Manual**

Copyright

Copyright 2012 BenQ Corporation. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system or translated into any language or computer language, in any form or by any means, electronic, mechanical, magnetic, optical, chemical, manual or otherwise, without the prior written permission of BenQ Corporation.

All other logos, products, or company names mentioned in this manual may be the registered trademarks or copyrights of their respective companies, and are used for informational purposes only.

Disclaimer

BenQ Corporation makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties, merchantability or fitness for any particular purpose. Further, BenQ Corporation reserves the right to revise this publication and to make changes from time to time in the contents hereof without obligation of BenQ Corporation to notify any person of such revision or changes.

This user manual aims to provide the most updated and accurate information to customers, and thus all contents may be modified from time to time without prior notice. Please visit <http://www.benq.com> for the latest version of this manual.

BenQ ecoFACTS

BenQ has been dedicated to the design and development of greener product as part of its aspiration to realize the ideal of the "Bringing Enjoyment 'N Quality to Life" corporate vision with the ultimate goal to achieve a low-carbon society. Besides meeting international regulatory requirement and standards pertaining to environmental management, BenQ has spared no efforts in pushing our initiatives further to incorporate life cycle design in the aspects of material selection, manufacturing, packaging, transportation, using and disposal of the products. BenQ ecoFACTS label lists key eco-friendly design highlights of each product, hoping to ensure that consumers make informed green choices at purchase. Check out BenQ's CSR Website at <http://csr.BenQ.com/> for more details on BenQ's environmental commitments and achievements.



ecoFACTS

csr.BenQ.com

- Arsenic-free optical glass
- BFR/PVC-free casing plastics
- Eco-friendly ink printing in packaging box
- 无砷光学玻璃
- 塑料外壳无溴化阻燃剂(BFR)与聚氯乙烯(PVC)
- 环保型油墨印刷包装盒
- 無砷光學玻璃
- 塑膠外殼無溴化阻燃劑(BFR)與聚氯乙烯(PVC)
- 環保型油墨印刷包裝盒

WEEE directive



Disposal of Waste Electrical and Electronic Equipment and/or Battery by users in private households in the European Union.



This symbol on the product or on the packaging indicates that this can not be disposed of as household waste. You must dispose of your waste equipment and/or battery by handling it over to the applicable take-back scheme for the recycling of electrical and electronic equipment and/or battery. For more information about recycling of this equipment and/or battery, please contact your city office, the shop where you purchased the equipment or your household waste disposal service. The recycling of materials will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and environment.

Battery

Recycling information: See <http://www.benq.com/support/recycle> for details.

CE Regulatory Notice

This device is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the Laws of the Member States relating Electromagnetic Compatibility (2004/108/EC); the Low Voltage Directive (2006/95/EC); the Restriction of The Use of Certain Hazardous Substances in Electrical And Electronic Equipment Directive (2002/95/EC), Turkish EEE Directive; the Commission Regulation (EC) No 1275/2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to eco-design requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment, and the Directive 2009/125/EC of the European parliament and of the council establishing a framework for the setting of eco-design requirements for energy-related products.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Safety warning and notice

Before operating the camera, please make sure that you read and fully understand the content in this section. If you ignore and violate all safety warning notices indicated in this section, the camera warranty may be void. Meanwhile, not only the camera but also you and all other people and things around you may be severely damaged, injured, or even placed in danger of death.

For your safety

- Keep the camera and its accessories out of the reach of babies, toddlers, and children. In particular, small parts such as memory cards and batteries could be easily dismantled and swallowed by them.
- Use only the original accessories to avoid possible risks to health and property, and thus meet all related legal regulations.
- Do not dismantle the camera under any circumstances.

- When using the flash, do not go too close to human eyes (particularly for babies, toddlers, and children) or animal eyes. Otherwise, when the flash fires, the light may cause damage to human eyes or irritate animals.
- Batteries could explode, for instance. All batteries can cause property damage, injury or burns if a conductive material such as jewelry, keys or beaded chains touch exposed terminals. The material may complete an electrical circuit and become quite hot. Exercise care in handling any batteries, particularly when placing it inside your pocket, purse, or other container with metal objects. Do not dispose of batteries in fire as they may explode.
- To prevent electric shock, do not attempt to disassemble or repair your camera by yourself.
- Some camera models accept non-rechargeable batteries. When using these batteries, do not charge them. Otherwise, dangers such as explosion and fire may occur.
- Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

• Warranty

- Warranty is void if damage or system failure occurred due to outside factors such as collision, fire, flood, dirt, sewage, earthquake, and other force majeure events as well as incorrect usage of electricity or use of non-original accessories.
- It is the sole responsibility of the user if problems (such as data loss and system failure) occurred due to non-factory installed software, parts, and/or non-original accessories.
- Do not change the camera. Any changes to the camera invalidate the warranty.

Taking care of your camera

- Always keep the camera in the accompanying leather case or pouch for better protection against splashes, dust, and collision.
- The only way of replacing the battery and the memory card is to open the battery/card cover.
- Dispose of unwanted batteries and cameras as permitted by the laws in your countries.
- Water may cause a fire or electric shock. Therefore, store your camera in a dry place.
- If your camera becomes wet, wipe it with a dry cloth as soon as possible.
- Salt or seawater may cause severe camera damage.
- Do not drop, knock, or shake the camera. A rude behavior of using the camera may damage the internal electronic circuit board, deform the lens shape, or make the lens unretractable.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the camera.
- Finger grease may be left on the camera lens and will result in unclear images or videos. To avoid this problem, be sure to clean the camera lens before taking pictures or recording videos. You should also clean the camera lens on a regular basis.
- If the lens is dirty, use a lens brush or soft cloth to clean the lens.
- Do not touch the lens with your fingers.
- If a foreign substance or water gets in your camera, please turn the power off immediately and disconnect the batteries. Next, remove the foreign substance or water and send it to the maintenance center.
- Whenever there is data in the internal memory or the external memory card, you should make a backup copy to a computer or disc. So, you can have a backup solution if data loss occurs.
- If the lens cannot retract into the camera, please replace the batteries first (usually this is because of drained batteries). Then the lens should retract automatically. If the lens still cannot retract, please contact your dealer.
- Under no circumstances should you push the lens back manually as this may damage the camera.
- All original accessories are designed only for use with this camera model you purchased. Do not use these accessories with other camera models or cameras of other brands to avoid unpredictable danger or damage.
- Before initial use of a memory card, always use the camera to format the card first.
- Remember to slide the write-protect tab (if available) to the unlock position. Otherwise, all data (if any) on the memory card is protected and the card cannot be edited or formatted.

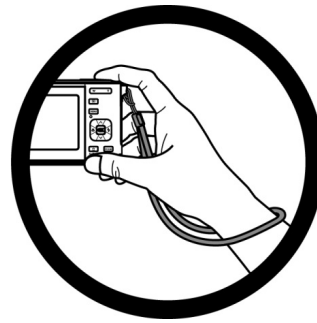
Operating environment

- Do not use or store your camera in the environments listed below:
 - Direct sunlight
 - Dusty places
 - Next to an air conditioner, electric heater or other heat sources

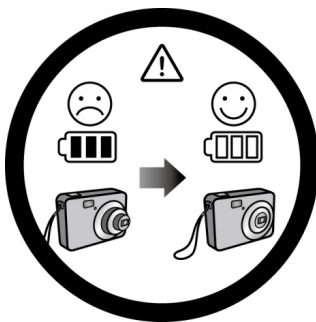
- In a closed car that is in direct sunlight
- Unstable locations
- Do not use your camera outdoors when it is raining or snowing.
- Do not use your camera in or near water.
- The camera operating temperature is between 0 and 40 degrees Celsius. It is normal for the operating time to be shortened when the temperature is low.
- The capacity of your camera batteries will reduce each time it is charged/emptied.
- Storage at too high or low temperatures will also result in a gradual capacity loss. As a result, the operating time of your camera may be considerably reduced.
- It is normal for the camera to become warm during operation, because the camera casing might conduct heat.



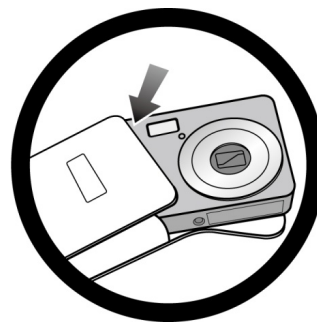
Do not hold the camera by excessive force. Plus, be sure to protect the camera from strong impacts.



To avoid accidental falling, please attach the hand strap to the camera and always hold the camera by keeping the hand strap around your wrist.



If the battery suddenly depleted and caused the lens fail to retract, please carefully protect the lens to avoid collision and insert a battery with full power ASAP.



When the camera is not in use, always turn the power off and make sure the lens has retracted successfully before storing the camera in its case. If you do not intend to use the camera for a long time, please remove the battery from the camera and store the battery carefully.



Keep your camera away from sharp objects and avoid collision.



When the camera is not in use, please place it in a steady place. Plus, always keep your camera away from pressure or any other similar environment (for example, in a pant pocket) to avoid possible damage.

Table of Contents

Introduction	9
System Requirements.....	9
Package Contents	10
Camera Views	11
Navigation Control	13
Getting Started	14
Attach the Camera Strap	14
Inserting the Battery	14
Inserting an SD/SDHC/SDXC Memory Card	15
Charging the Battery by USB	15
Turning the Power On and Off	16
Initial Settings	16
Modes	16
Using the LCD monitor.....	17
LCD Monitor Layout.....	17
Recording Layout.....	18
Changing the LCD Monitor Display	22
Recording Images,Videos and Voices	22
Taking Images	22
Setting the Zoom Control.....	23
Using Flash.....	24
Setting the Focus Mode.....	24
Using the Function Menu	25
Recording Videos.....	29
Using the Record Menu.....	31
Using Voices Recording.....	41
Playback	46
Viewing in Single Navigation	46
Viewing Thumbnails	46
Zooming images	47
Playing Videos.....	47
Playing Voice Recording.....	48
Playing Voice Memo.....	49
Deleting an Image/Video/Audio	50
Playback Menu	51
Using the Setup Menu	59
Setting Sounds	59
Setting Power Save.....	59
Setting LCD Save.....	60
Setting Date & Time	60
Setting Language.....	60
Setting File Numbering	60
Setting TV Out.....	61
Setting LCD Brightness	61
Setting Memory Kit	61

Reset All	61
Making Connections	62
Connecting the Camera to a TV	62
Connecting the Camera to a PC	62
Connecting the Camera to a Printer	63
Setting the Print Mode Menu	64
Troubleshooting and service information	65
Technical support	66
Specifications	67

Introduction

System Requirements

For Windows:

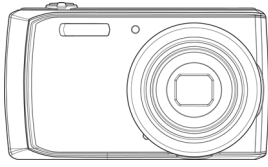
- Windows XP/Vista/Win7
- Processor: Pentium II 450MHz or above
- Memory: Minimum 512MB RAM (Over 1G recommended)
- HDD space: 200MB or above
- 24bit color display monitor
- Microsoft DirectX 9.0C
- USB port and CD-ROM drive

For Macintosh:

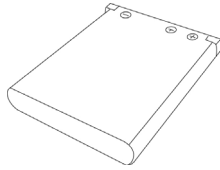
- Power Mac G3 or later
- Mac OS 10.3.X (X=0~9) ~ 10.7.2
- Memory: 512MB or above
- Q. Time player ver. 6.0.3 or above
- USB port and CD-ROM drive

Package Contents

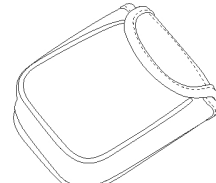
Please check the contents of your camera package. It should contain:



Digital camera



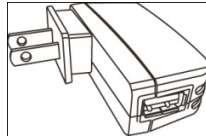
Rechargeable battery



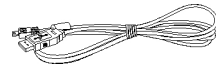
Camera pouch



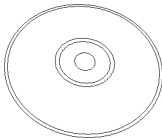
Wrist strap



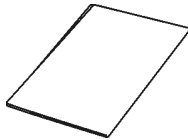
USB adapter



USB cable



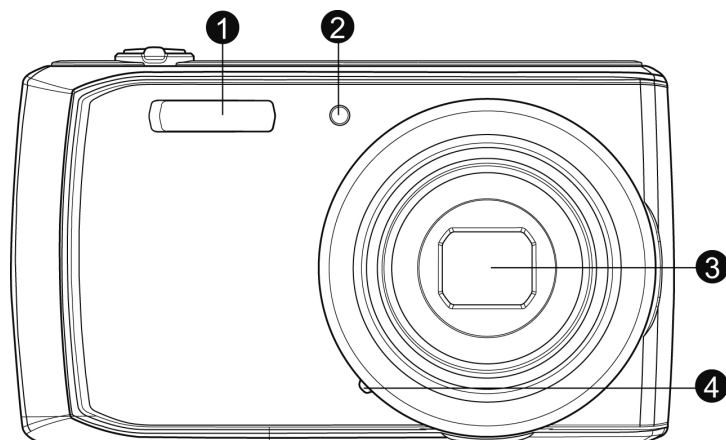
CD-ROM



Quick Guide

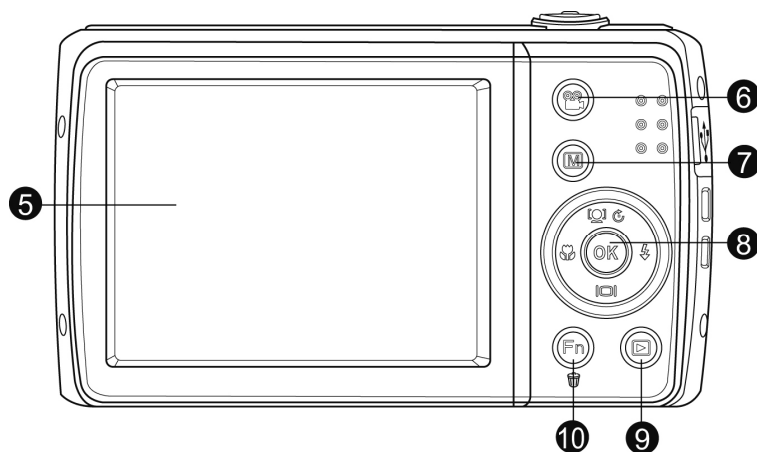
Camera Views

Front View



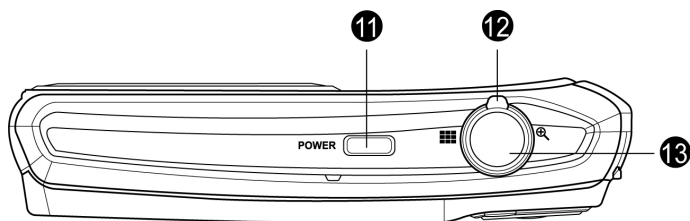
- | | |
|----|----------------|
| 1. | Flash |
| 2. | Self-timer LED |
| 3. | Lens |
| 4. | Microphone |

Back View



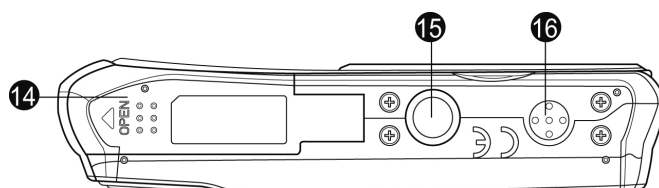
- | | |
|-----|------------------------------------|
| 5. | LCD monitor |
| 6. | Movie button |
| 7. | Menu button |
| 8. | OK button/4-way navigation control |
| 9. | Playback button |
| 10. | Function/Delete button |

Top View



- | | |
|-----|----------------|
| 11. | Power button |
| 12. | Zoom dial |
| 13. | Shutter button |

Bottom View

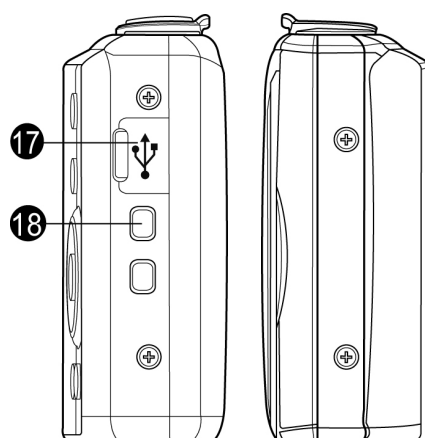


14. Battery/Memory card compartment

15. Tripod screw hole

16. Speaker

Left/Right View



17. USB/TV Out

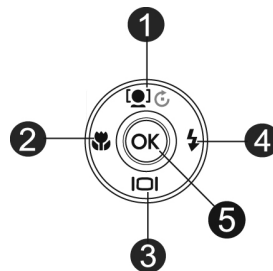
18. Strap ring

Button	Description
Power	Press the Power button to turn the power on/off.
Shutter	Press to capture an image or start/stop recording audio clip.
Zoom dial	In photo and movie mode, spin the zoom dial to left to zoom out, right to zoom in. In Playback mode, spin to zoom in to magnify image or zoom out enter 9-image/calendar thumbnails.
Menu	Press to enter or exit menu/submenu.
Function/Delete	In Photo and Movie mode, press to enter function menu. In Playback mode, press to delete an image, video or audio clip.

Playback	Press to enable Playback mode or return Record mode.
Movie	Press to start/stop recording video.

Navigation Control

The **4-way Navigation Control** and the **OK** button allow you to access the various menus available from the On Screen Display (OSD). You can configure a wide range of settings to ensure maximum results from your images and videos. Further functions of these buttons are as follows:

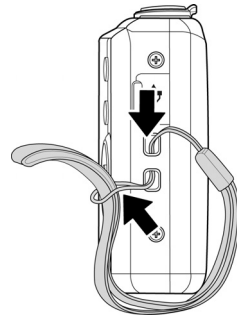


No.	Description
1	Face Tracking/Rotate Button
2	Macro Button
3	Display Button
4	Flash Button
5	OK Button

Button	Description
OK	<ol style="list-style-type: none"> 1. Confirm a selection when using the OSD menus. 2. In Playback Movie/Audio mode, press to Start video or audio playback.
Flash/Right	<ol style="list-style-type: none"> 1. In Photo Mode, press to scroll through the flash mode options. (Auto, Red-eye Reduction, Forced On, Slow Sync and Forced Off) 2. In Playback mode, press to view the next image, video or audio clip. 3. In playback Movie mode, press to Forward video playback. 4. In Menu, press to enter the submenu or to navigate through the menu selections.
Macro/Left	<ol style="list-style-type: none"> 1. In Photo Mode, press to scroll through Macro options. (Super Macro, Pan Focus, Infinity and normal) 2. In Playback mode, press to view the previous image, video or audio clip. 3. In Playback movie mode, press to Rewind video playback. 4. In Menu, press to exit a submenu or to navigate through the menu selections.
Up/Face Tracking/Rotate	<ol style="list-style-type: none"> 1. In Photo Mode, press to turn the face tracking function on and off. 2. Playing Video/Audio file, press to Pause/Start video or audio playback. 3. In Playback photo mode, press to rotate the image clockwise 90 degrees by each press of the button. This feature is applicable for still images only. 4. In Menu, press to navigate through the menu and submenu selections.
Display/Down	<ol style="list-style-type: none"> 1. The LCD monitor can be changed into 5 different types such as Basic, Full, None and Guideline. 2. Playing Video/Audio file, press to stop video/audio playback. 3. In Menu, press to navigate through the menu and submenu selections.

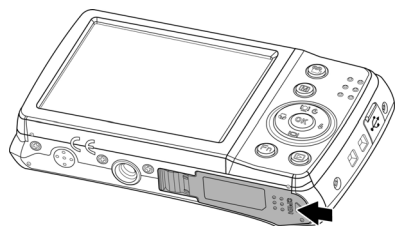
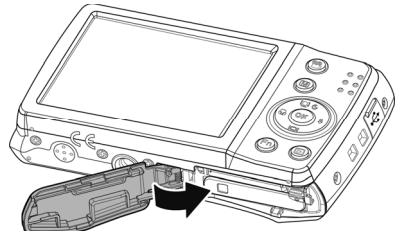
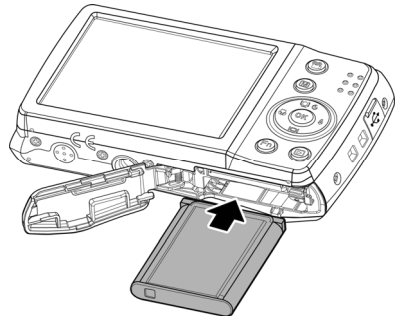
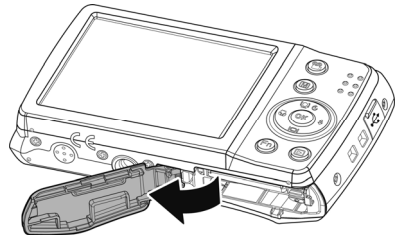
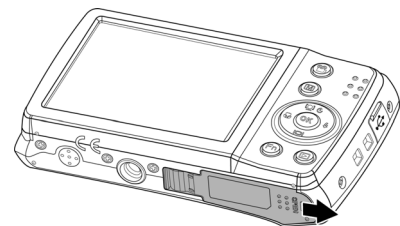
Getting Started

Attach the Camera Strap



Inserting the Battery

1. Make sure the power is off before inserting the battery.
2. Unlock and open the battery/memory card compartment at the bottom of the camera.
3. Insert the battery into the compartment with the terminal facing inside the camera with correct orientation as shown.
4. Close and lock the battery/memory card compartment.

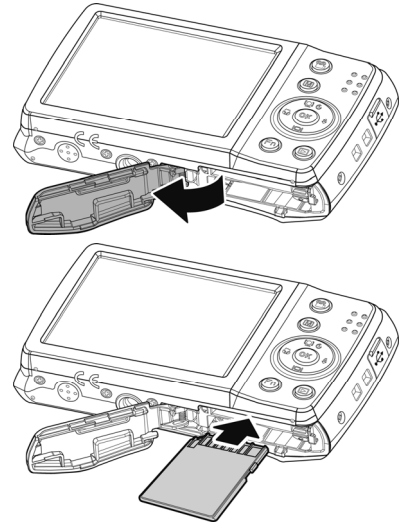


Inserting an SD/SDHC/SDXC Memory Card

1. Unlock and open the Battery/memory card compartment at the bottom of the camera.
2. Insert the SD/SDHC/SDXC card into the memory card slot with the metallic part facing the back side of the camera.
3. Push the SD/SDHC/SDXC card into the memory slot until it clicks into place.
4. Close and lock the Battery/memory card compartment.

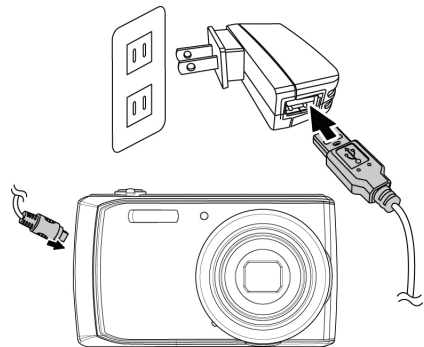
To remove the SD/SDHC/SDXC card

1. Unlock and open the battery/memory card compartment.
2. Gently push the card until it pops out.
3. Pull out the card carefully.



Charging the Battery by USB

1. Connect the camera with the USB cable as shown.
2. Connect the other end with the USB adapter and plug it into a power outlet or with the USB port of PC directly for charging.
 - When the battery is charging, the LED indicator flashes.
 - When the battery is fully charged, the LED indicator goes off.
 - When the battery is unusual charged, the LED indicator flashes rapidly.
 - When the camera charges without the battery inside, the LED indicator goes off.



It's recommended not operating the camera when charging.

Turning the Power On and Off

- Press the Power button, then the startup image displays briefly and the startup sound plays if enabled. The zoom lens extends and the camera is turned on in Record mode.
- Press the Playback button, then the camera is turned on in Playback mode. The zoom lens is not extended.

To turn off the camera, press the **Power button**.

Initial Settings

Setting the Language

1. Press ▲, ▼, ◀ or ▶ to move through the selection.
2. Select a language, and then press **OK** to apply.

Setting the Date & Time

1. Press ◀ or ▶ to move through the selection.
2. Press ▲ or ▼ keys to change the value for the date and time.
3. Press **OK** to apply.

4. If necessary, press  to close the menu.

Now, you are ready to start taking images and videos.



Holding down ▲ or ▼ keys to change the values continuously.


Modes

Your camera has three modes:


Record Mode

This is the default mode while you turn on the camera every time. You are able to take images and record audio clips in this mode.

Playback mode

Press the **Playback button**  after the camera is turned on to view and edit captured images or playback videos and audio clips. The recording of voice memo attached to images is available in this mode.

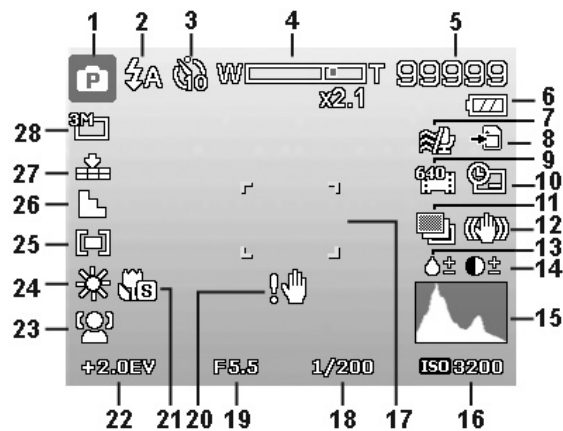
Movie mode

Press the **Movie button**  after the camera is start/stop recording video in this mode.

Using the LCD monitor

LCD Monitor Layout

Photo Mode Screen Layout



No.	Item	Description
1	Record Mode	Indicates the current mode.
2	Flash	Indicates flash settings.
3	Self-timer/Burst	Indicates drive mode settings.
4	Zoom indicator	Displays zoom.
5	Shots remaining	Indicates the remaining shots available.
6	Battery	Indicates battery level.
7	Wind Cut	Reduces wind noise during movie recording.
8	Storage media	Indicates current storage media in use.
9	Movie size	Indicates movie size.
10	Date stamp	Indicates date stamp is enabled.
11	AEB	Indicates AEB function is enabled
12	Stabilizer	Indicates stabilizer function is enabled.
13	Saturation	Displays saturation settings.
14	Contrast	Displays contrast settings.
15	Histogram	Graphic display of Brightness.
16	ISO	Displays ISO settings.
17	Focus area	Indicates focus area.
18	Shutter speed	Displays shutter speed settings.
19	Aperture value	Displays aperture settings.
20	Shake warning	Indicates that the camera is shaking.
21	Focus	Indicates focus is enabled.
22	Exposure	Displays exposure settings.
23	Face tracking	Indicates face tracking is enabled.
24	White balance	Displays white balance settings.
25	Metering	Displays metering settings.
26	Sharpness	Displays sharpness settings.
27	Quality	Displays quality settings.
28	Photo size	Displays photo size settings.

Movie Mode Screen Layout



Recording Layout

No.	Item	Description
1	Key indicator	Displays the commands on 4-way Navigation Control button
2	Recorded time	Displays recorded time.
3	Recording status	Indicates recording status.



The Pre-Record icon appears on the screen in red color as the same position as zoom indicator.

Playback Mode Screen Layout

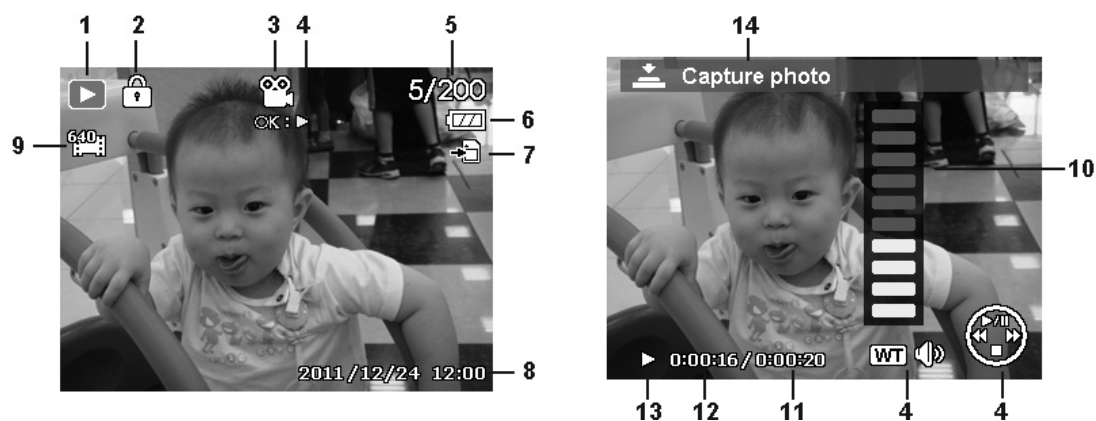
The Playback mode display varies depending on the type of image being viewed.

Playback mode display of still images:



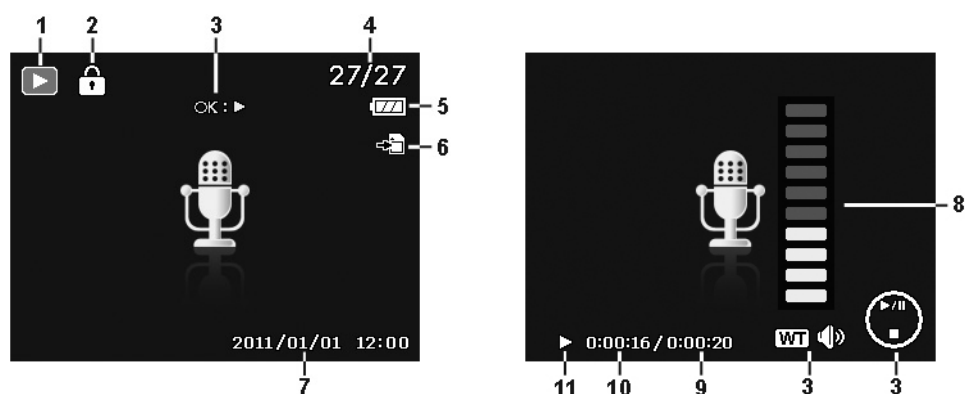
No.	Item	Description
1	Playback mode	Indicates playback mode.
2	Protect	Indicates file is protected.
3	Voice memo	Indicates voice memo is attached.
4	Button intro	Indicates the button to press on the camera to play a video or audio file.
5	File no./Total no.	Indicates the file number over the total number of files in the storage card.
6	Battery	Indicates battery level.
7	Storage media	Indicates used storage memory.
8	Recording information	Displays recording information of the file.
9	DPOF	Indicates the file is marked for printing.
10	Image Size	Displays the image size settings.

Playback mode of videos:





No.	Item	Description
1	Playback mode	Indicates playback mode.
2	Protect	Indicates file is protected.
3	Video clip	Indicates the file is a video.
4	Button intro	Indicates the button to press on the camera to play a video or audio file.
5	File no./Total no.	Indicates the file number over the total number of files in the storage card.
6	Battery	Indicates battery level.
7	Storage media	Indicates used storage memory.
8	Recording date & time	Displays the date and time of the video clip.
9	Video size	Indicates the size of the video clip.
10	Volume	Indicates the volume while playing.
11	Video length	Display the total length of the video clip.
12	Played time	Indicates the played time of the video.
13	Playing status	Displays playing status.
14	Capture image	Capture the screenshot and save.

Playback mode of audio clips:



No.	Item	Description
1	Playback mode	Indicates playback mode.
2	Protect	Indicates file is protected.
3	Button intro	Indicates the button to press on the camera to play a video or audio file.
4	File no./Total no.	Indicates the file number over the total number of files in the storage card.
5	Battery	Indicates battery level.
6	Storage media	Indicates used storage memory.
7	Recording information	Displays recording information of the file.
8	Volume	Indicates volume settings.
9	Audio length	Display the total length of the audio clip.
10	Played time	Indicates played time.
11	Playing status	Displays playing status.

Changing the LCD Monitor Display

The type of information displayed on the LCD monitor can be changed using the  button. Press the  button repeatedly to change the LCD display from one type to another. In Photo/Movie Mode, the LCD display can be changed into any of the following:

- Basic
- Full
- None
- Guideline



- The OSD information may vary depending on the record mode type.
- The following icons, if enabled, are still displayed on the LCD even when OSD off or Guide lines on: AEB, Face tracking, Drive mode, and Focus.
- Use the "Guide lines" to properly set image for capture.

In Playback mode, the LCD display can be changed into any of the following:

- Basic
- Full
- None




LCD display cannot be changed in the following situations:

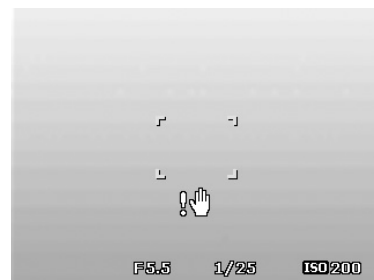
- Recording video or audio clips
- Playing video or audio clips
- Playing slideshow

Recording Images, Videos and Voices


Taking Images

1. Turn on the camera by pressing the **Power button**.
2. Frame the shot using the focus bracket on the LCD monitor. See illustration on the right.
3. Pressing the **Shutter button** down halfway automatically focuses and adjusts the exposure, and pressing the **Shutter button** down fully captures the images.



When the shake warning icon  appears, hold the camera steadily, with your arms at your side or use a tripod to stabilize the camera to prevent blurred images.

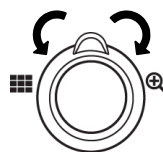


Setting the Zoom Control

1. Spin the **Zoom dial** to zoom in or zoom out an image.
2. The zoom indicator appears on the LCD monitor. 

Zoom dial

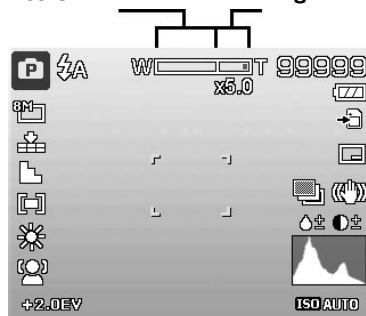
1. Spin the dial clockwise (right) to zoom in. 
2. Spin the dial counterclockwise (left) to zoom out. 



1. Activate digital zoom. See "Setting the Digital Zoom" on page 44.
2. Spin the **Zoom dial** clockwise/counterclockwise optically zooms in/out to the maximum until it stops.
3. Release the **Zoom dial**.

Optical zoom 1X to 5X

Digital zoom 1X to 5X

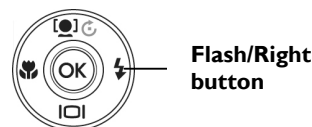


Digital zoom is not activated in recording videos

Using Flash

When taking pictures in difficult lighting conditions, use the **Flash/Right** button to get correct exposure. This function cannot be activated in recording videos or continuous shooting.

- Press the **Flash/Right** button on your camera repeatedly until your desired flash mode is displayed on the LCD monitor.



Your camera is equipped with five flash modes:

⚡ AUTO. The flash fires automatically whenever extra lighting is needed.

⚡👁 Red-eye reduction. The flash fires twice to reduce the red-eye effect.

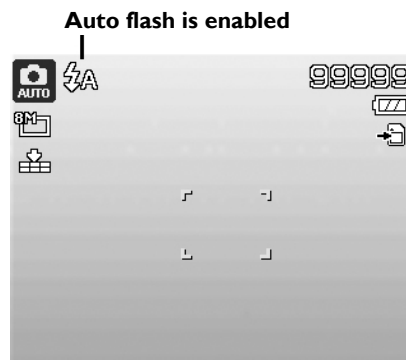
⚡ Forced on. The flash fires whenever you press the Shutter button regardless of lighting conditions.

⚡SL Slow sync. The flash fires with a slow shutter speed.

🚫 Forced off. The flash is turned off.



- Flash function is only available in shooting still images but not available in Burst and AEB modes.
- Do not charge the flash while spinning the Zoom dial. Charge the flash after releasing the zoom dial if necessary.



Setting the Focus Mode

This function allows users to define the type focus when recording a still image or a video clip.

- Press the **Macro/Left** button repeatedly until the desired focus mode icon is displayed on the lower left corner of the LCD monitor.



Your camera supports the four focus modes:

Normal. With normal focus, the focus range starts from 15 cm. When the camera is set to Normal mode, there is no icon displayed on the screen.

🌸 Super Macro. This mode is designed for close-up photography. When Super Macro is set, the focus cannot be adjusted until Super Macro is canceled.

PF Pan Focus. The focus of this mode is in the maximum Depth of Field (DOF), not designing for close-up photography.

INF Infinity. When Infinity is set, the camera focuses on distant objects.



Focus enabled

Using the Function Menu

The **Function Menu** is used to adjust capture settings in Photo Mode.

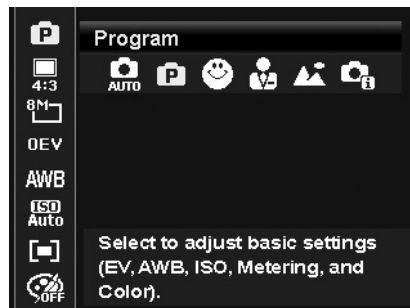


Press the **FUNC** button of your camera to launch the Function Menu.
Press the **FUNC** button again to close the menu.

- The Menu bar displays the current status of your camera settings. Only the available functions for the settings are shown as icon on the menu bar.
- The available options for each item on the menu bar are shown in the Menu options.
- Use the ◀ or ▶ key to move through the menu selections then press the **OK** button to save and apply changes.

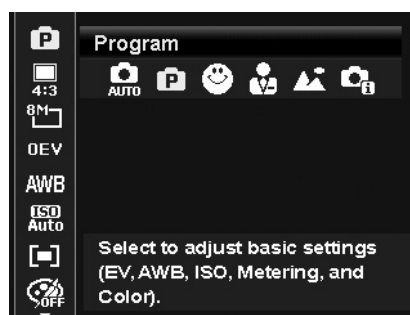
Menu bar

Menu Options



My Mode

1. The My Mode function displays the **5** most recent modes used in order. When you move through the different modes in the menu options, the items on the menu bar changes synchronously to the corresponding available settings.
2. **Auto mode** is fixed in the first of Menu options.



Aspect Ratio

The Aspect Ratio function is used to set the width to height ratio of an image. Display available remaining shots in help text synchronously while selecting different options.

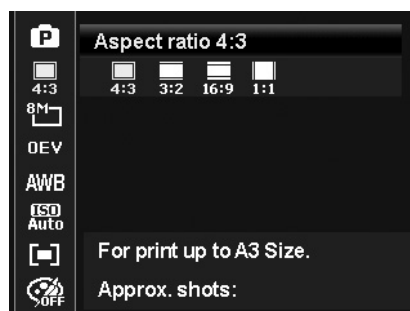












Photo Size








The table below shows the Photo Size values for still images when selecting **Aspect ratio 4:3**.

Icon	Pixel Size	Printing Size Suggestion
	4320 × 3240	A2 Size
	3264 × 2448	A3 Size
	2592 × 1944	A4 Size
	2048 × 1536	A5 size
	640 × 480	E-mail






The table below shows the Photo Size values for still images when selecting **Aspect ratio 3:2**.

Icon	Pixel Size	Printing Size Suggestion
	4320 × 2880	8" × 12"
	3264 × 2176	6" × 9"
	2592 × 1728	5" × 7"
	2048 × 1360	4" × 6"
	640 × 424	E-mail

The table below shows the Photo Size values for still images when selecting **Aspect ratio 16:9**.

Icon	Pixel Size	Printing Size Suggestion
	4320 × 2424	HDTV
	3264 × 1832	HDTV
	2592 × 1456	HDTV
	2048 × 1152	HDTV
	640 × 360	E-mail

The table below shows the Photo Size values for still images when selecting **Aspect ratio 1:1**.

Icon	Pixel Size	Printing Size Suggestion
	3744 × 3744	Square Composition
	2832 × 2832	Square Composition
	2240 × 2240	Square Composition
	1728 × 1728	Square Composition
	480 × 480	E-mail

EV Compensation

Images can be captured with the overall scene intentionally made brighter or darker.

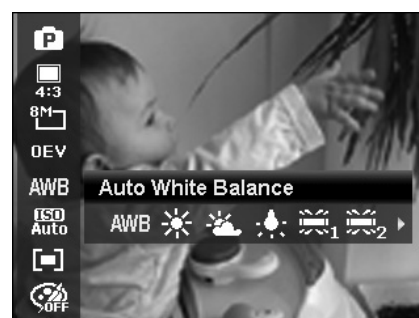
- To adjust EV settings, press the ◀ or ▶ keys to increase/decrease the value. As you adjust the settings, the LCD monitor synchronously displays the image applying the EV settings. Press the **OK** button to save and apply changes.



White Balance

This sets the white balance for a variety of lighting conditions and permits images to be captured that approach the conditions that are seen by the human eye.

- As you move through the selection, you can see the preview on the LCD monitor synchronously.

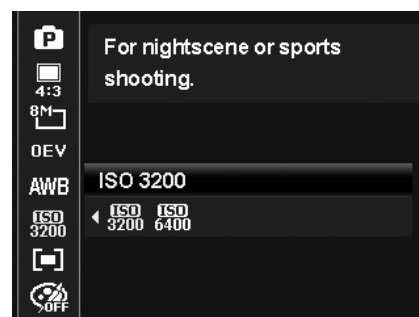


Icon	Item	Description
	Auto White Balance	The camera automatically adjusts the white balance.
	Daylight	Ideally used for bright sunny conditions.
	Cloudy	Ideally used for cloudy conditions.
	Tungsten	Ideally used for indoor images with tungsten or halogen lighting without a flash.
	Fluorescent 1	Ideally used for indoor images with bluish fluorescent lighting conditions.
	Fluorescent 2	Ideally used for indoor images with reddish fluorescent lighting conditions.
	Custom	Used when light source cannot be specified. Press the Shutter button for the camera to automatically adjust the appropriate white balance setting according to the environment.

ISO

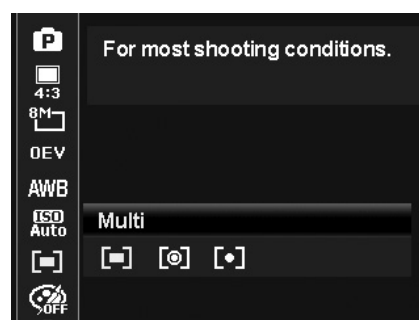
This sets the sensitivity for capturing images. When the sensitivity is raised (and the ISO figure is increased), photography will become possible even in dark locations, but the more pixelated (grainier) the image will appear.

- Use a higher ISO setting in dim conditions and a lower ISO setting in brighter conditions.



Metering

This sets the metering method for calculating the exposure.



Icon	Item	Description
	Multi	The entire area of the screen is measured, and the exposure is calculated.
	Center	Averages the light metered from the entire frame, but gives greater weight to the subject matter at the center.
	Spot	A very small portion of the center of the screen is measured, and the exposure is calculated.

Color Mode

The Color Mode function applies different colors or tones for a more artistic effect on the still images or videos.

- As you move through the selection, the preview on the LCD monitor changes synchronously.



Icon	Item	Description
	Off	The camera records normally.
	Vivid	The camera captures the image with more contrast and saturation emphasizing on the bold colors.
	Sepia	Images are captured in sepia tones.
	Color Accent (Red)	Retains red tone while the rest of the scene becomes black and white.
	Color Accent (Green)	Retains green tone while the rest of the scene becomes black and white.
	Color Accent (Blue)	Retains blue tone while the rest of the scene becomes black and white.
	B&W	Images are captured in black and white.
	Vivid Red	Captured image becomes reddish. Ideally used to record images like flowers and cars to make them more vivid.
	Vivid Green	Captured image becomes greenish. Ideally used to record images like mountains and lawns to make them more vivid.
	Vivid Blue	Captured image becomes bluish. Ideally used to record images like the sky and the ocean to make them look more vivid.

Recording Videos

1. Press the **Movie button** to start recording.
2. Focus your camera on the subject that you want to take.
3. Use the **Zoom dial** to zoom in and zoom out an image.
4. To pause recording, press the key ▲.
5. To continue recording, press the key ▲ again.
6. To stop recording, press the **Movie button**.



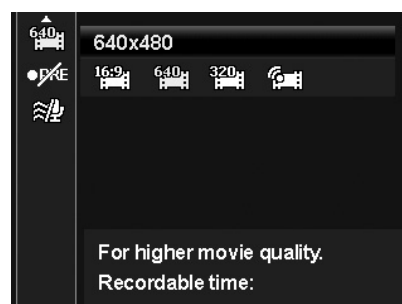
- When the camera stop recording due to reaching maximum capacity (**4GB**) for a single video, simply press the Movie button again to continue recording.
- The camera will automatically stop recording when the memory capacity is full.
- Digital zoom is not available while recording a video.
- Sound cannot be recorded while using zooms (Spinning the **Zoom dial**.)
- Power save mode is not available in video recording or pause recording.

Settings of Recording Videos

Press **Function button** to enable video setting menu before recording a video.

Movie Size

The Movie Size function appears only in Movie mode. Use this function to adjust the resolution and quality of movie clips.



Icon	Item	Description
	1280 X 720	HDTV (Support SDHC Class 6) The maximum length of a single video recording is up to 29 minutes. It will automatically stop recording when the recording time is over 29 minutes or the file size is over 4 GB.
	640 X 480	High Quality
	320 X 240	Normal
	Web	For Internet, see " Internet Mode " on page 30 below.

Internet Mode

The Internet Mode allows you to record videos with predefined video settings for easy upload to the Internet website.

Therefore when you record using the Internet Mode, the following standards are followed:

- Recorded videos are set to Internet standard resolution of 640 X 480.
- Recording automatically stops when the file reaches 1 GB.
- Available recording time for Internet Mode is up to 10 minutes.



For uploading videos to YouTube, you can follow the instructions below to install YouTube uploader:

- Connect your camera to PC. Go to "**My Computer**", and you will see a YouTube uploader folder.
- After installing the program in the folder, you can easily upload video to YouTube now.

Pre-Record

You can catch the first three seconds of action you would have potentially missed. Once enable this function, the camera starts recording video automatically before pressing Shutter button. As soon as the Shutter button is hit, the most recent three seconds of video is added to the beginning of the clip.

Display the icon in red while turning Pre-Record on.



Pre-Record will be canceled in the following situation:

- Switch to Photo mode or Playback mode.
- Turn the unit off.
- Enter USB mode

Setting Wind Cut

This feature reduces wind noise during movie recording.







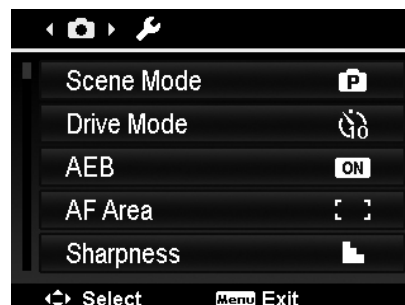
Using the Record Menu

If you are in Photo Mode, you can access the Record menu simply by pressing the **MENU** button on your camera. When the menu is displayed, use the 4-way navigation control and the **OK** button to move through menu selections and apply your desired settings. To close the menu anytime, press the menu button again.

Record Menu

The Record menu allows you to change modes, and setup other capture settings.










1. Press  to launch the Record Menu.
2. Use the  or  keys to move through the menu
3. To select an item, press  or **OK** button.
4. Change the submenu settings using the 4-way navigation control.
5. Press the **OK** button to save and apply settings.


















Setting the Scene Mode

1. From the Record Menu, press to select **Scene Mode**.
2. Use the navigation controls to move through the selection.
3. Press the **OK** button to save and activate the selected scene mode.



Icon	Item	Description
	Auto	The simplest way to shoot basic images. Settings are adjusted automatically.
	Program	The camera automatically adjusts suitable shooting settings like shutter speed and aperture values.
	Intelligent Scene	The camera detects the shooting conditions and automatically switches to the appropriate scene mode.
	Portrait	Focus on portraits and soften the background to give the image a sense of depth. Enhance natural skin tones.
	Landscape	This feature is used to emphasize wide scenic views.
	Sunset	This feature enhances the red hue for recording sunset images.
	Backlight	This feature is used to capture the image of a backlight object by changing the metering.
	Kids	This feature is used to capture still images of moving kids.
	Night Scene	This feature is used to capture images with night scenery background.

	LOMO	This feature is used to capture images with over-saturated colors, off-kilter exposure or blurring.
	Fireworks	For shooting firework displays in vivid colors. It's recommended to use a tripod.
	Snow	This feature is used for beach and snow scenes.
	Sports	This feature captures still images in high speed motions.
	Party	This feature is used for wedding or indoor party settings.
	Candlelight	This feature is used to capture warm candle light effects.
	Night Portrait	This feature is used to capture portrait pictures with night or dark background.
	Soft Skin	This feature enhances skin tone thus facial skin appears smooth.
	Flowing Water	This feature enhances smooth effects like water or silk.
	Food	This feature is used to capture food images. The increased saturation in this mode makes the captured image more enticing.
	Building	This feature enhances the edges of captured images.
	Text	This feature enhances the black and white contrast normally used when capturing text images.
	Foliage	This feature boosts the saturation of greens to give a rich color to foliage.
	Auction	This feature combines up to 4 shots into a single image and provides 4 patterns to select for usage of auction.
	Smile Capture	This feature uses face tracking to auto detect faces to capture. When smiles are detected, it continuously captures the image.
	Blink Detection	This feature detects if the subject blinked an eye when the image is captured and gives the user an option whether to save it or not.
	Pre-composition	This feature captures an image temporarily as a reference. Full press shutter after referring the subject to the reference point.
	Love Portrait	This feature uses face tracking to auto detect faces to capture portraits images without the help of others. When over two faces are detected, AF is automatically activated. The camera starts count down and captures a picture in two seconds.
	Self Portrait	This feature set zoom to wide end. When one face is detected, AF automatically activated and plays the sound (Bi) for notice. Then camera starts count down and captures a picture in two seconds.

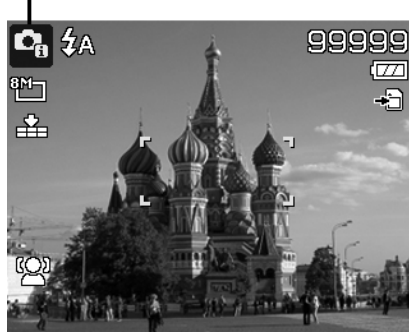
	D-Lighting	This feature enhances the shadow and highlight details of an image.
	Fisheye Lens	This feature captures images with fisheye lens effects.
	Photo Stitch	This feature combines a panoramic photo from multiple shots.
	Miniature Effect	Blur the parts of photo to make the scene looks like a miniature scale model. It is recommended to capture from a high angle to simulate the miniature effect.
	Voice REC	This mode is used to record audio clips.

After selecting the scene mode, the selected mode, except Voice Rec, will be added to the forefront in **My Mode** of Function Menu. In the Menu Options, the **Auto** mode is fixed and the other 5 items can display the most recent used modes. See "Using the Function Menu" on page 25.

Using Intelligent Scene

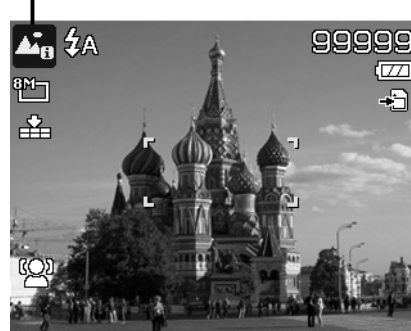
This feature is most useful for novice users to capture great images even without basic knowledge of photography. Simply frame the shot with the help of Intelligent Scene Mode, the camera automatically recognizes 11 kinds of scenes - Portrait, Landscape, Sunset, Macro, Text, Snow, Backlight, Backlight Portrait, Night Scene, Night Portrait and Foliage - and selects the ideal settings.

Intelligent scene icon. After the camera detects the shooting conditions, this icon changes to show the detected scene mode.



The camera changed to Landscape mode automatically.

1. Select from the Scene Mode submenu.
2. Focus the camera on the subject to capture.
3. The camera detects the shooting conditions and switches to an appropriate scene mode.
4. Half press the Shutter button to focus the subject. The frame turns green to indicate focus is set.
5. Press the Shutter button to take the shot.



Using Kids Mode

To capture a great moment for your kids, just keep the camera in kid mode. The mode provides higher shutter speed and always focuses on moving subject.



Using Sports Mode

This mode provides shutter in **Burst speed** (Keep shooting images long as the Shutter button is pressed) which allows you to capture a sequence of pictures that are frames apart clearly.

Using Party Mode

Party mode features on Red-eye reduction flash and adjustable face tracking.

Using Soft Skin mode

When the soft skin mode is activated, it makes wrinkles and lines look less conspicuous, while preserving resolution in areas of the picture outside of the skin.

Using Food Mode

This mode features on macro focus and auto flash designed for close-up photography.



Using Foliage Mode

In foliage mode, the greens, blues, are brilliantly enhanced making scenic pictures pop out with bright color.

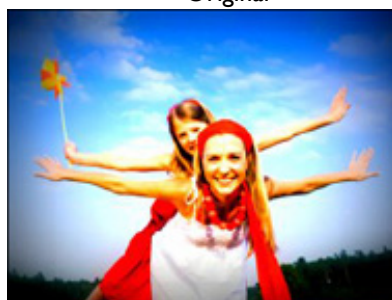
Using LOMO Mode

The LOMO mode applies the following effects on the photo:

1. Over-saturated colors
2. Off-kilter exposure
3. Blurring
4. Darkening around the edges of photo



Original



LOMO

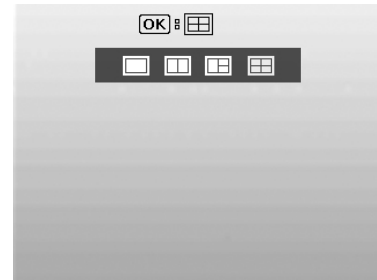


When you active LOMO mode, you can select Lomo settings (LOMO 1 、LOMO 2 、LOMO 3 、LOMO 4) in Color mode under Function menu. The Lomo settings also support Movie mode.

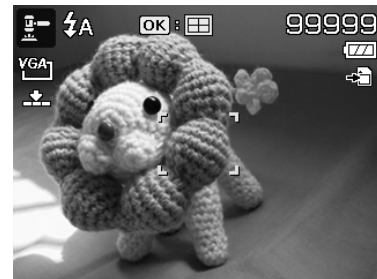
Using Auction Mode

The camera composes a combined image in lower resolution suited to online posting.

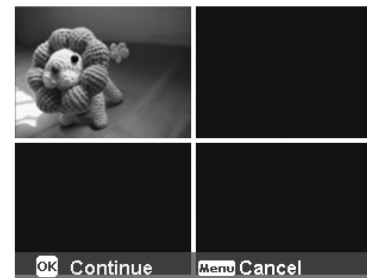
1. Select Auction mode from Scene mode menu.
2. Use ◀ or ▶ keys to choose a pattern.
3. Press the **OK** button to start shooting.



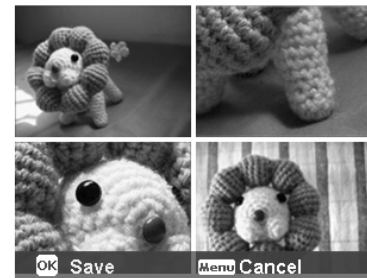
4. Frame the subject and press the **Shutter button** to take the first shot.



5. Press **OK** button to continue the second shot.
6. Or, press **Menu** button to cancel the process.

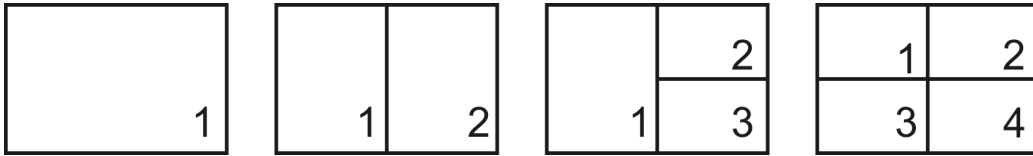


7. Repeat step 4 to 6, until the pattern is filled in images.
8. Press **OK** button to save the composed image.
9. Or, press **Menu** button to cancel the process.



10. The camera saves the image to memory.
11. Use USB cable or memory card reader (Please refer to "Connecting the Camera to a PC" on page 57) to transfer the image to PC and upload it to website.

Auction mode provides 4 kinds of pattern as follow



The image is set to low quality and VGA (640x480) size only.

Using Smile Capture Mode

Smile capture mode detects every smile all the time and performs Automatic Focus (AF) to capture an image without pressing Shutter button.

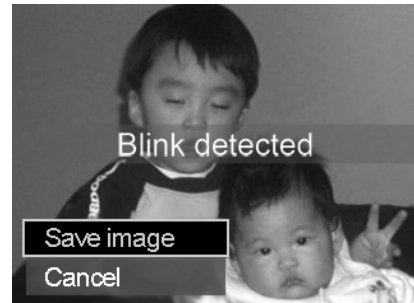
1. Select Smile capture mode from scene menu.
2. Focus the camera on the subject to capture.
3. When a smile is detected, the white focus frame turns green to denote camera shutter and take a shot automatically.



Using Blink Detection Mode

If closed eyes are detected, a saving confirmation menu appears on the screen, allowing you to re-take the shot before your subject or subjects move on.

1. Select Blink Detection Mode from Scene Mode submenu.
2. Half press the **Shutter button** to focus the subject. The frame turns green to indicate focus is set.
3. Press the **Shutter button** to capture the image and automatically save the Image.
4. If the camera detects subject blinked eye, a "**Save image**" or "**Cancel**" option appears on the screen.
5. Select **Save image** to save or **Cancel** to disregard.



Using Pre-composition Mode

Pre-composition helps you get the background you want, even if you need to ask someone else to record the image for you.

1. Compose the background you want and press the **Shutter button** (full press), which causes 1/3 of semi-transparent image of the background to remain on the LCD monitor. Press **Menu button** to cancel the semi-transparent temporarily image.



2. Ask someone else to record a shot of you against your original pre-composed background, telling him/her to compose the image by using the 1/3 semi-transparent screen image as a guide.



3. Move your position until photographer confirm your whole or half body in the frame and in the right place.
4. Press the Shutter button. Camera stores the image produced by this step only.



Using Love Portrait

If over two faces had been recognized, the camera performs 2-second countdown with a beep notice then take a shot without pressing the **Shutter button**.

Using Self Portrait

If a face had been recognized, the camera performs 2-second countdown with a beep notice then take a shot without pressing the **Shutter button**.

Using D-Light Mode

Active D-Lighting mode preserves details in highlights and shadows, creating photos with natural contrast. Use for high contrast scenes, for example, when photographing brightly light outdoor scenery through a door/window, or taking pictures of shaded subjects on a sunny day.

Using Fisheye Lens Mode

For shooting fisheye photos with more creative and fun.



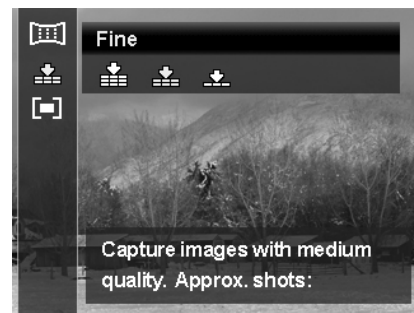
Original



Fisheye Lens

Using Photo Stitch Mode

Use this feature to create a panoramic photo from multiple shots. You can combine up to 2 or 3 shots into one single image quickly and easily.




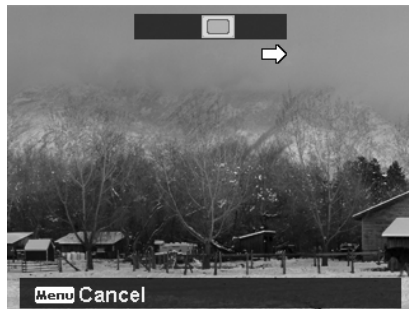
1. Enter Photo Stitch mode and press the UP key to select the direction how shots will be stitched. Then, press the Shutter button to take the first shot.



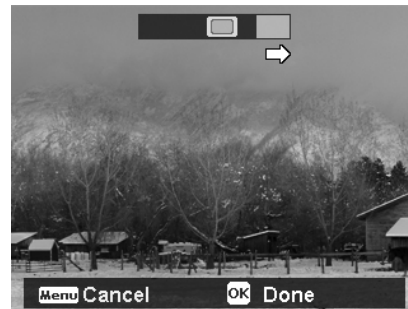
2. A guidance bar appears after taking the first shot. Follow the direction displayed on LCD screen to pan the camera. Or, press the Menu button to restart shooting.




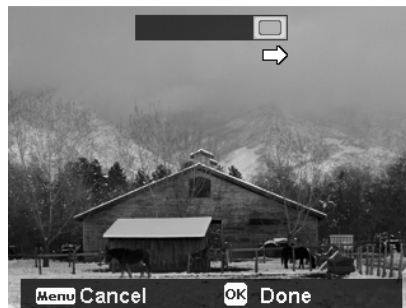
- Once the  icon overlaps the yellow block, you can get another shot without pressing the shutter button.



- After taking the second shot, the yellow block moves to the end of the guidance bar, and the OK button appears as well. You can press the OK button to stitch the first two shots, or the Menu button to restart shooting.



- Same as step 3, moves the  icon to overlap the yellow block, and then you can get the third shot and the combined image is generated automatically. Now, you finish this set of stitch shooting.



Using Miniature Effect Mode

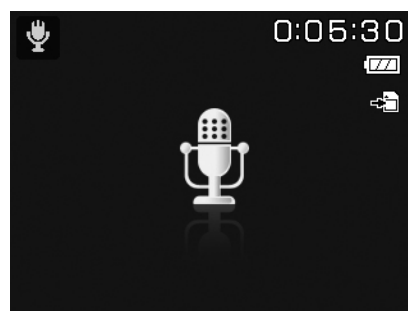
Once enter Miniature Effect mode, two parallel lines displayed on screen indicates where will **not** be blurred. The result preview won't be showed immediately due to DSP (Digital Signal Processing) limitation. Please check the result in Auto Review or Playback mode.



Miniature preview in Playback mode

Using Voices Recording

1. From the Scene menu, select **Voice REC**. The Voice Recording screen layout is displayed on the LCD monitor.
2. Press the **Shutter button** to start recording.
3. Press the **Shutter button** again to stop recording.

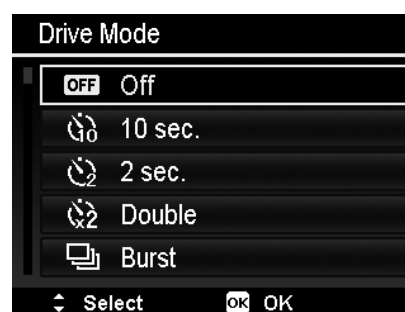
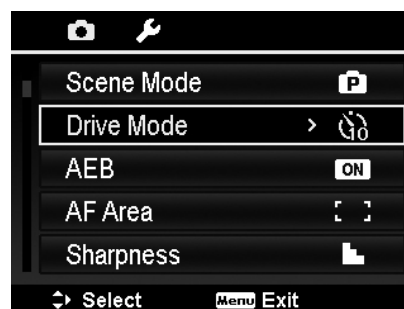


Setting the Drive Mode

Your camera features a Self-timer and Burst which can be set in the Drive mode function in the Record Menu. This function is only available in recording still images. The Drive mode setting is automatically set to off when you turn off the camera.

To set the Drive Mode

1. From the Record menu, select **Drive Mode**.
2. Use the **▲** or **▼** keys to go through the selection.
3. Press the **OK** button to save and apply changes.

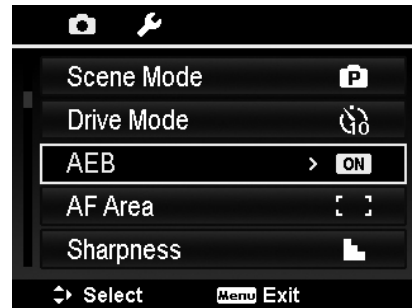


Icon	Item	Description
	Off	Captures an image without time delay.
	10 Sec.	Sets a 10-second delay to capture image after pressing the Shutter button.
	2 Sec.	Sets a 2-second delay to capture image after pressing the Shutter button.
	Double	Performs delay and capture twice: <ul style="list-style-type: none"> • Performs a 10-second delay, then captures the image. • Performs another 2-second delay then captures the image again.
	Burst	Performs continuous shooting when the Shutter button is pressed. Stops shooting when the shutter button is released.
	Speedy Burst	Captures 30 images in a shot when the Shutter button is pressed. Auto set Image size to 4:3 VGA only.

Setting the AEB

AEB stands for Automatic Exposure Bracketing. It permits 3 consecutive images in the order of standard exposure, under exposure and overexposure compensation.

1. From the Record menu, select **AEB**.
2. Use the ▼ or ▲ keys to go through the selection.
3. Press the **OK** button to save and apply changes.



Setting the AF Area

AF stands for Automatic Focus. This feature determines the area on which the camera focuses.

1. From the Record menu, select **AF Area**.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

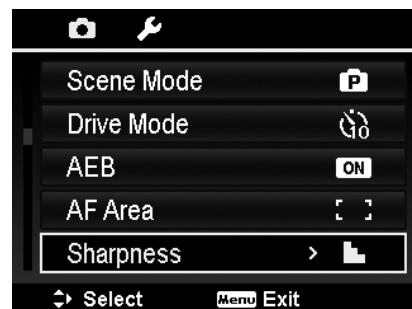


Icon	Item	Description
	Wide	The camera automatically selects focus area within the wide frame.
	Center	The focus area is fixed on the center.
	Tracking AF	The camera will focus the subject as it moves and keep it continually in focus automatically.

Setting Sharpness

This function allows you to enhance or soften finer details of your images.

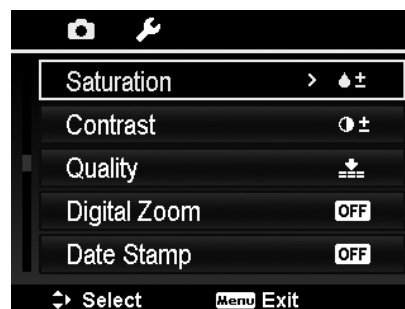
1. From the Record menu, select **Sharpness**.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.



Icon	Item	Description
	High	Sharpens the image.
	Normal	Normal sharpness.
	Low	Softens the image.

Setting Saturation

1. The Saturation function lets you adjust the color saturation in your images. From the Record menu, select **Saturation**.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

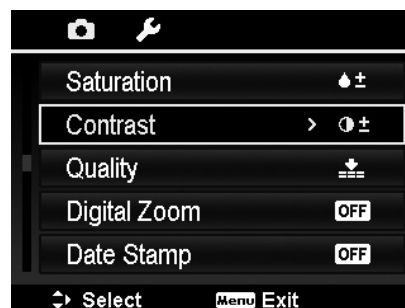


Icon	Item	Description
	High	Enhance the saturation.
	Normal	Normal saturation.
	Low	Reduce the saturation.

Setting Contrast

This function allows you to adjust the contrast of your images.

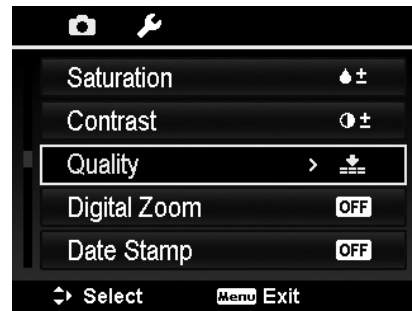
1. From the Record menu, select **Contrast**.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.



Icon	Item	Description
	High	Enhance the contrast
	Normal	Normal contrast
	Low	Reduce the contrast

Setting Quality

The Quality sets the quality (compression) at which the image is captured.

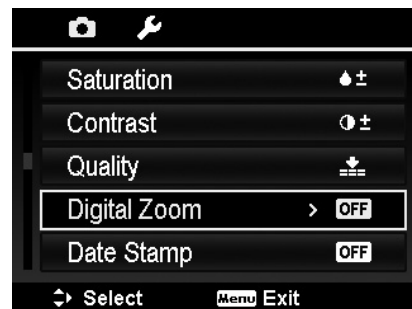


Icon	Item	Description
	Superfine	3x compression rate.
	Fine	7x compression rate.
	Normal	12x compression rate.

Setting the Digital Zoom

Your camera enlarges an image using the optical zoom first. When the zoom scale exceeds 5X, the camera uses digital zoom.

1. From the Record menu, select **Digital Zoom**.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.



Icon	Item	Description
	Intelligent Zoom	Enlarges the image digitally with almost no distortion. This feature is available for still images only.
	Standard Zoom	Enlarges all image sizes up to a maximum of 5x in preview, but the image quality deteriorates.
	Off	Uses the optical zoom only.

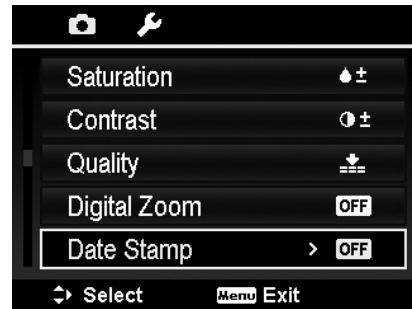


- Digital Zoom is not available in Face tracking on, Movie, and Voice Recording modes.
- The maximum Intellect zoom scale varies depending on the image type and resolution.

Setting the Date Stamp

The date of recording can be printed directly on the still images. This function must be activated before the image is captured. Once date and time are stamped on an image, they can no longer be edited or deleted.

1. From the Record menu, select **Date Stamp**.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

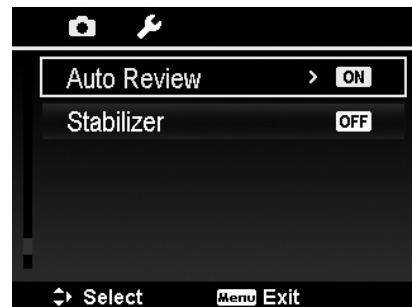


Setting Auto Review

The Auto Review function lets you view the captured image right after shooting it. If Auto review is On, the camera will display the captured image for **1 second** on the LCD monitor.

To set Auto Review

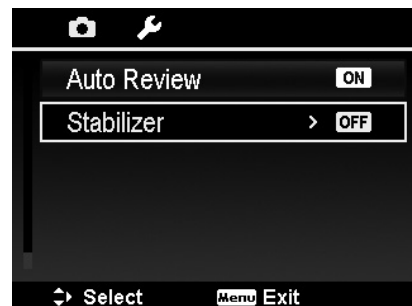
1. From the Record menu, select **Auto Review**.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.



Setting Stabilizer

This function allows you to prevent blurred images caused by shaking.


1. Enable the **Stabilizer** under the **Record Menu**.
2. Use the ▲ or ▼ keys to go through the selection.
3. Press the **OK** button to save and apply changes.

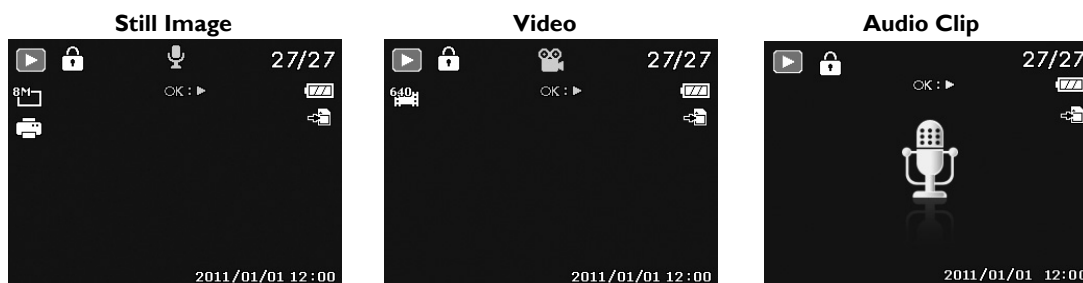


Playback

Viewing in Single Navigation

The Single navigation mode displays the image one by one on the LCD monitor

1. Press the **Playback button**  on the camera.
2. The LCD monitor displays an image. To understand the icons and other information on the screen, please see "Photo Mode Screen Layout" on page 17.




3. Use the ◀ or ▶ keys to view next/previous image/video/audio.
4. To play a video or audio clip, press the **OK** button. See "Playing Videos" on page 47 and "Playing Voice Recording" on page 48 for more details.

Viewing Thumbnails

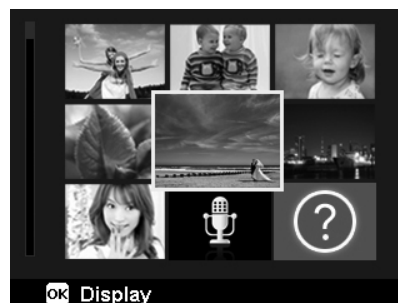
This function allows you to view 9-thumbnail images or by calendar mode on the LCD monitor at the same time.

To set 9-images mode

1. Press the **Playback button**  on the camera.
2. Spin the **Zoom dial** counterclockwise (left) **once** to enter 9-images mode.
3. Use the navigation controls to move through the items.
4. Press the **OK** button to select the image and view it normally.


Scroll bar.

If scroll bars appear, it indicates that the screen can be scrolled.



Thumbnail view



To set calendar mode

1. Press the **Playback button**  on the camera.
2. Spin the **Zoom dial** counterclockwise (left) **twice** to view thumbnails in calendar mode.
3. Use the navigation controls to move through the items.
4. Press the **OK** button to select an image and view it normally.



Thumbnail icons:

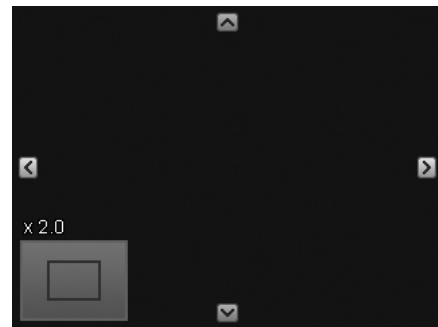
When you view the thumbnails, some images may contain icons. These icons indicate the type of file or recording.

Icon	Type	Description
	Voice Record	Indicates a voice recording file.
	File Error	Indicates an error file.



Zooming images

The zoom view function works with still images only.


- In normal view, spin the **Zoom dial** clockwise (right) repeatedly until the desired zoom view.
- The 4 arrows on the LCD monitor indicate that the image is zoomed in.
- You can zoom to view an image of up to 12X.
- Use the navigation controls to view the zoomed image.
- Press the **Menu** button to close zoom view.



Playing Videos

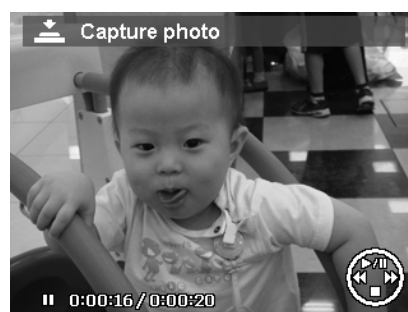
1. Press the **Playback button**  on the camera.
2. Use the navigation controls to scroll through the saved images. A video clip has a video icon displayed on screen.
3. Press the **OK** button to play the video.
4. During playback, press and hold the ◀ or ▶ keys to fast forward or rewind the video. The camera supports forward and rewind speed of up to 4x.
5. During playback, use the **Zoom dial** to control volume. Spin clockwise (right) to increase volume/Spin counterclockwise (left) to decrease volume.
6. Press the ▲ key to pause playback. Press the key ▲ again to resume. When paused, the play info will remain on screen except **WT** .
7. To forward or rewind the video frame by frame, press the key ▲ to pause playback, then press the ◀ or ▶ keys.
8. Press the ▼ key to stop the playback. The LCD monitor displays the video frame image in Single navigation mode.





- The play info, except the icon **WT** , will be displayed when the video is paused, during REW/FF or frame by frame modes
- Volume cannot be adjusted when paused or during REW/FF modes.

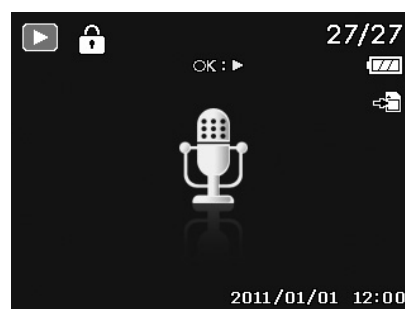
To capture screenshot image from a video clip

1. During playback of video, press the key ▲ to pause playback on your desired video frame to capture.
2. Press the **Shutter button** to capture a screenshot.
3. The camera stop playback. The LCD monitor displays the captured image in Single navigation mode.









Playing Voice Recording

1. Press the **Playback button**  on the camera.
2. Use the navigation controls to scroll through the saved images. When viewing a voice recording file, the LCD monitor displays the screen layout of Audio clips. See picture on the right.
3. Press the OK button to play the voice recording.
4. During playback, use the **Zoom dial** to control volume. Spin clockwise (right) to increase volume/Spin counterclockwise (left) to decrease volume.
5. Press the ▲ key to pause playback. Press the ▲ key again to resume. When paused, the play info will remain on screen except **WT** .
6. Press the ▼ key to stop the playback. The LCD monitor displays the image in Single navigation mode.



Playing Voice Memo

Voice memo is separately recorded and attached to a captured image. See "Voice Memo" on page 54 on how to record voice memo.

1. Press the **Playback button**  on the camera.
2. Use the navigation controls to scroll through the saved images. An image file with voice memo has a voice memo icon located on the top center of the LCD monitor. See picture on the right.
3. Press the OK button to play the voice recording.
4. During playback, use the **Zoom dial** to control volume. Spin clockwise (right) to increase volume/Spin counterclockwise (left) to decrease volume.
5. Press the key  to pause playback. Press the key  again to resume. When paused, the play info will remain on screen except  .
6. Press the key  to stop the playback. The LCD monitor displays the image in Single navigation mode.




Deleting an Image/Video/Audio

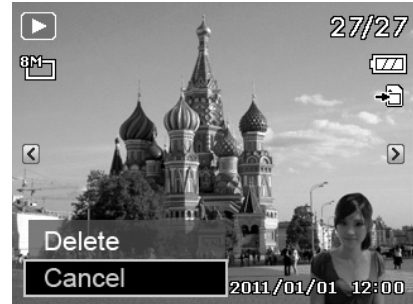
- Using the **Delete** button.
- Using Playback Menu Delete settings. See "Delete" on page 51.

Using the Delete Button




Use the **Fn/Delete** button on your camera to delete an image/video/audio clip.

1. Press the **Playback button**  on the camera.
2. View images/videos/audio clips in Single navigation mode.
3. Use the ◀ or ▶ keys to scroll the display.
4. When the desired image/video/audio clip is displayed on the LCD monitor, press the **Fn/Delete** button.
5. A confirmation selection appears on screen.
6. Select **Delete**.
7. Press the **OK** button to delete.
8. The next image is displayed on the LCD monitor. To delete another file, use the ◀ or ▶ keys to scroll through the images/videos/audio clips. Then, repeat steps 6 to 7.
9. To close the Delete function and go back to the single navigation mode, select Cancel.



Playback Menu

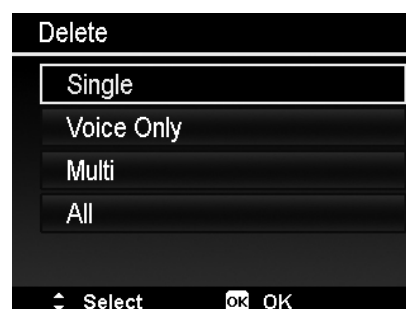
1. Press the **Playback button**  on the camera.
2. Press **Menu button** to launch the Playback Menu.
3. Use the **▲** or **▼** keys to move through the menu selections.
4. To select a menu, press **▶** or the **OK** button.
5. Change the submenu settings using the 4-way navigation control.
6. Press the **OK** button to save and apply settings.



Delete

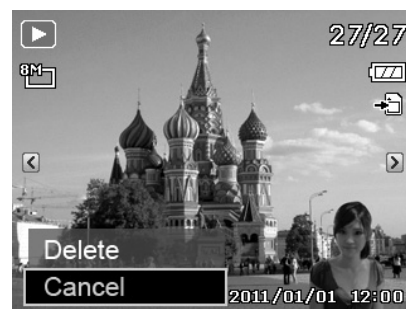
The Delete function allows to remove unwanted files in the internal memory or on the memory card.

1. From the Playback menu, select **Delete**.
 - The Delete submenu is displayed on the LCD monitor.
 - **Single**. Select one file to delete.
 - **Voice Only**. Delete **only** the attached voice memo, not voice clips. The image is still retained in the memory.
 - **Multi**. Select multiple files to delete at the same time.
 - **All**. Delete all files.




To delete a single file:

1. Select **Single** in the Delete submenu, the images are displayed on the LCD monitor in single navigation mode.
2. Use the **◀** or **▶** keys to scroll the display.
3. When the desired image/video/audio clip is displayed on the LCD monitor, select **Delete**.
4. Press the **OK** button to delete.
5. The next image is displayed on the LCD monitor. To delete another file, use the **◀** or **▶** keys to scroll through the images/videos/audio clips. Repeat steps 3 to 4.
6. To close the Delete function and go back Playback menu, select **Cancel**.



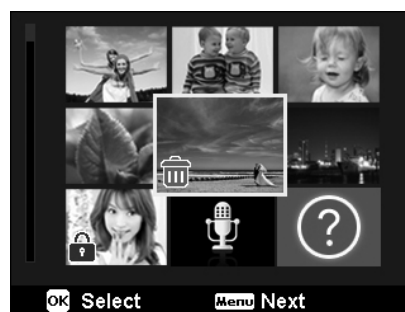
To delete attached voice memo:

1. Press the **Playback button**  on the camera.
2. View images/videos/audio clips in Single navigation mode.
3. Use the **◀** or **▶** keys to scroll until the desired image with voice memo is displayed on the screen.
4. Press **Menu** button to launch the Playback Menu.
5. Use the **▲** or **▼** keys to move through the Playback menu selections then select **Delete**.
6. From the Delete submenu, select **Voice only**.
7. A confirmation selection appears, select **Yes**.
8. Press the **OK** button to delete the attached voice memo and go back to Playback mode.



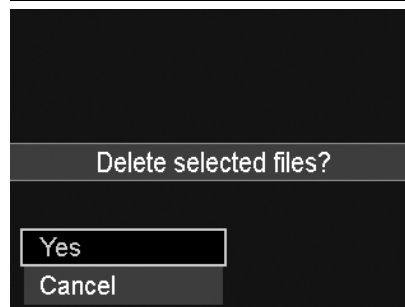
To delete multiple files:

1. Select **Multi** in the Delete submenu, the images are displayed in thumbnail view on the LCD monitor.
2. Use the navigation control to move through the files.
3. When the desired image/video/audio clip is highlighted, press the **OK** button to mark image/video/audio clip for deletion.
4. Repeat step 3 until all desired images for deletion are marked.
5. Press the **MENU** button. A confirmation selection appears.
6. Select **Yes** to confirm.
7. Press the **OK** button to delete marked files.



To delete all files:

1. Select **All** in the Delete submenu. A confirmation message appears.
2. Select **Yes**.
3. Press the **OK** button to delete all files.



Slide Show

The slide show function enables you to playback your still images automatically in order one image at a time.

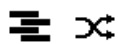
To view slideshow:

1. From the Playback menu, select **Slide Show**. The Slideshow menu appears.
2. Set the slide show settings.
3. Select **Start**, then press the **OK** button to start the slide show.
4. During slideshow, press the **OK** button to pause slide show.
5. Use the **▲** or **▼** keys to move through the options. Select whether to **Continue** or **Exit** the slide show.
6. Press the **OK** button to apply selected option.

To change slide show settings:

1. From the Slide show menu, use the **▲** or **▼** keys to move through the selections.
2. Select Interval setting. Press the **◀** or **▶** keys to adjust. Choose among the available interval settings: 1 sec., 3 sec., 5 sec., and 10 sec.
3. Select Transition setting. Press the **◀** or **▶** keys to adjust.

Choose among the available transition settings: **■→** **↔**



4. Select Repeat setting. Press the **◀** or **▶** keys to adjust. Available settings are: Yes, No.



Protect

Set the data to read-only to prevent images from being erased by mistake.

A protected file has a lock icon  when viewed on Playback mode.

To protect files:

1. From the Playback menu, select **Protect**.
2. The Protect submenu is displayed on the LCD monitor.
 - **Single**. Select one file to lock/unlock.
 - **Multi**. Select multiple files from the thumbnail view to lock/unlock.
 - **Lock All**. Lock all files
 - **Unlock All**. Unlock all files.

To protect/unprotect a single file:

1. Select **Single** in the Protect submenu, the images are displayed on the LCD monitor in single navigation mode.
2. Use ◀ or ▶ keys to scroll the display.
3. When the desired file is displayed on the LCD monitor, press the **OK** button to select **Lock/Unlock**.
4. To close the protect/unprotect function and go back Playback menu, select **Exit**.

To protect/unprotect multiple files:

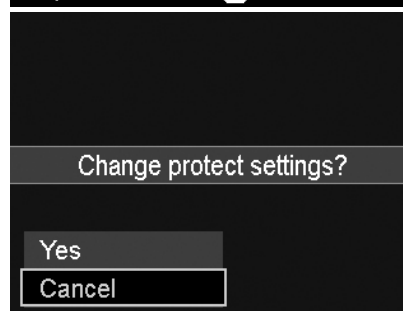
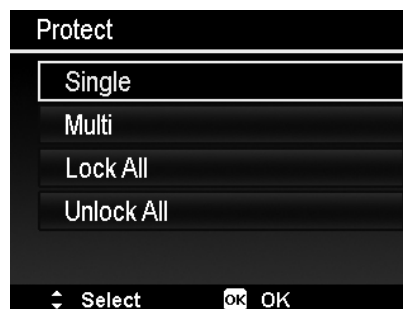
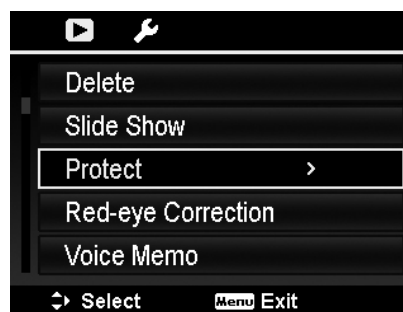
1. Select **Multi** in the Protect submenu, the images are displayed in thumbnail view on the LCD monitor.
2. Use the navigation control to move through the files.
3. When the desired file is highlighted, press the **OK** button to mark/unmark the file clip for protection.
4. Repeat step 3 until all desired files to protect are marked.
5. Press the **MENU** button. A confirmation selection appears.
6. Select **Yes**.
7. Press the **OK** button to lock files and go back to Playback mode.

To protect all files:

1. Select **Lock all** in the Protect submenu. A confirmation message appears.
2. Select **Yes**.
3. Press the **OK** button to lock all files.


To unlock all files:

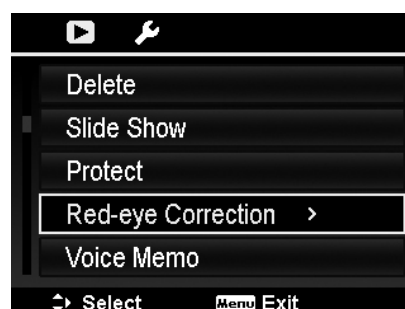
1. Select **Unlock all** in the Protect submenu. A confirmation message appears.
2. Select **Yes**.
3. Press the **OK** button to unlock all protected files.



Red-eye Correction


The Red-eye Correction function is used to reduce red eye in captured images. This function is only available for still images.

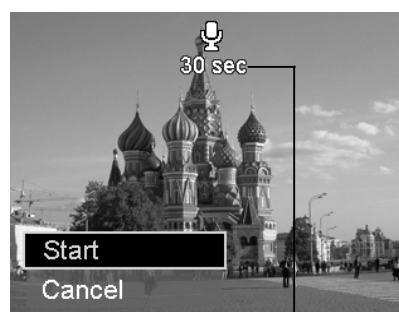
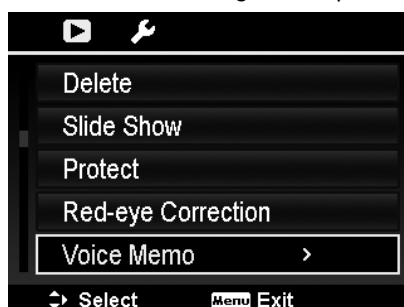
1. Press the **Playback button**  on the camera.
2. Press the ◀ or ▶ keys to scroll and select an image.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Red-eye Correction**.
5. Select **Start**.
6. Press the **OK** button to start correction.
7. After completing Red-eye correction, a menu selection appears.
 - **Overwrite**. Save and replace old file with a new one.
 - **Save As**. Save the new file as a new one.
 - **Cancel**. Cancel red-eye correction.
8. Press the **OK** button to save/cancel changes.



Voice Memo

A maximum of 30 seconds of audio can be recorded as a memo for captured still images.

1. Press the **Playback button**  on the camera.
2. Press the ◀ or ▶ keys to scroll and select an image to attach voice memo to.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Voice Memo**.
5. Select **Start**, then press the **OK** button to start recording.
6. Press the **OK** button again to stop recording.



Time left (n seconds) for recording.

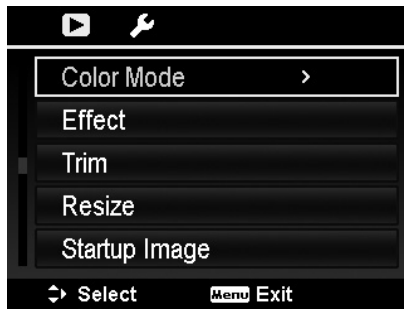


When you record voice memo to an image with an existing voice memo, the old recording file would be replaced by the new one.

Color Mode

The Color Mode function lets you adjust edit still images to apply different colors or tones for a more artistic effect. Edited images in this function are saved as a new file.

1. Press the **Playback button**  on the camera.
2. Press the ◀ or ▶ keys to scroll and select an image to edit.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Color Mode**. The Color Mode submenu appears.




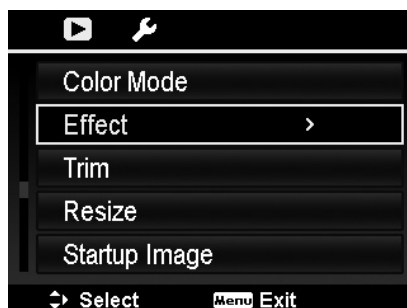
5. Press the ◀ or ▶ keys to scroll and select an option. As you move through the selection, the preview on the LCD monitor changes synchronously.

Icon	Item	Description
	Off	No effect is added to the image.
	Sepia	Image is saved with a sepia tone.
	B&W	Image is saved in black and white.
	Vivid Red	Image is saved with reddish tint.
	Vivid Green	Image is saved with greenish tint.
	Vivid Blue	Image is saved with bluish tint.

Effect

The Effect function is only applicable to still images with different artistic effect. Edited images in this function are saved as a new file.

1. Press the **Playback button**  on the camera.
2. Press the ◀ or ▶ keys to scroll and select an image to edit.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Effect**. The Effect submenu appears.




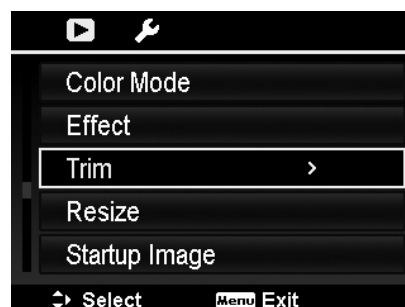
5. Press the ◀ or ▶ keys to scroll and select an option. As you move through the selection, the preview on the LCD monitor changes synchronously.

Icon	Item	Description
	Off	No effect is added to the image.
	Negative	Image appears to be the opposite of the original image.
	Mosaic	Image is saved with mosaic tiles.
	Astral	Image is saved with starburst.

Trim

The Trim function allows you to trim an image to another image size. This function is only available for still images.

1. Press the **Playback button**  on the camera.
2. Use the ◀ or ▶ keys to scroll and select an image to trim.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Trim**. The Trim screen layout is displayed on the LCD monitor.
5. Use the **Zoom dial** to change size as zoom in/out.



No.	Description
1	Enlarged image
2	4-way indicator
3	Trimmed size
4	The approx. location of the trimmed area
5	Image area




6. Use the navigation controls to move the image.
7. Press the **OK** button to apply changes. A menu selection appears.
8. Select whether to:
 - **Overwrite.** Save and replace the old file with the new one.
 - **Save As.** Save the new file as a new one.
 - **Cancel.** Cancel Trim.
9. Press the **OK** button to save/cancel changes.



- Trim function is not available for images with image size set to VGA.
- All images will be trimmed in 4:3 ratio regardless of its original image ratio.

Resize

Resizes a previously saved image and only resizing to a smaller size is available.

1. Press the **Playback button**  on the camera.
2. Use the ◀ or ▶ keys to scroll and select an image to resize.
3. Press the **MENU** button to launch the Playback menu.
4. Select **Resize**. The Resize submenu is displayed on the LCD monitor.
5. Select size among: 8M, 5M, 3M, and VGA. Available size settings may vary depending on original image size. Unavailable settings appear as gray icons in Resize submenu.
6. After selecting size, a menu selection appears. Select whether to:
 - **Overwrite**. Save and replace old file with a new one.
 - **Save As**. Save the new file as a new one.
 - **Cancel**. Cancel resize.
7. Press the **OK** button to save/cancel changes.

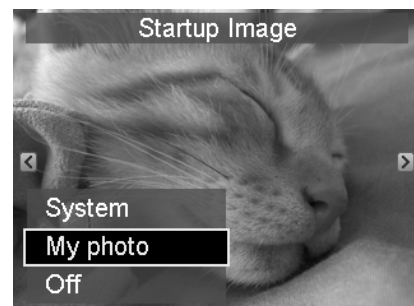


Resize function is not available for images with image size set to VGA.

Startup Image

You can specify the startup image from the captured images for camera.

1. Press the **MENU** button to launch the Playback menu.
2. Select **Startup Image**. The menu selection appears.
3. Select options:
 - **System**. Use camera default image.
 - **My Photo**. Use the ◀ or ▶ keys to scroll and select desired image.
 - **Off**. Disable the startup image.
4. Press the **OK** button to apply changes.

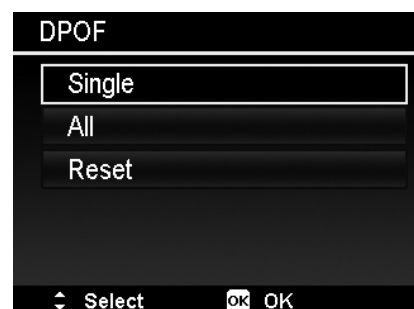


The startup image will still be displayed startup even if the selected image was deleted.

DPOF

DPOF is the abbreviation for Digital Print Order Format, which allows you to embed printing information on your memory card. You can select the images to be printed and how many prints to make with the DPOF menu in the camera and insert the memory card to the card compatible printer. When the printer starts printing, it will read the embedded information on the memory card and print the specified images.

1. Press the **MENU** button to launch the Playback menu.
 - Select **DPOF**. The submenu appears. **Single**. Select a single image to **mark**.
 - **All**. Mark all images in the memory card.
 - **Reset**. Reset all DPOF settings to initial default settings.



To set DPOF on a single image/all images:

1. Select **Single** or **All** on the DPOF submenu.
2. For single image, use the ◀ or ▶ keys to scroll and select an image to mark for printing.
3. Specify the number of copies. Use the ▼ or ▲ to increase/decrease number.
4. Press the **Function/Delete** button to toggle between turning on/off the date stamp.
5. Press the **OK** button to save DPOF settings.



To reset DPOF:

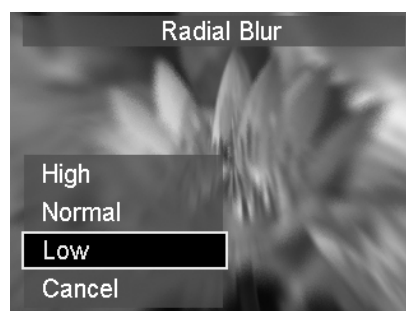
1. Select **Reset** on the DPOF submenu. A confirmation message appears.
2. Select **Yes**.
3. Press the **OK** button to reset DPOF settings.



Radial Blur

The Radial Blur is an effect creates blurs around a point.

1. Use the ▼ or ▲ keys to specify the level of blurs. The adjusting result on preview synchronously while selecting the level.
2. Press the **OK** button to proceed save options.
 - **Overwrite.** Save and replace the old file with a new one.
 - **Save As.** Save the new file as a new one.
 - **Cancel.** Cancel Radial blur.



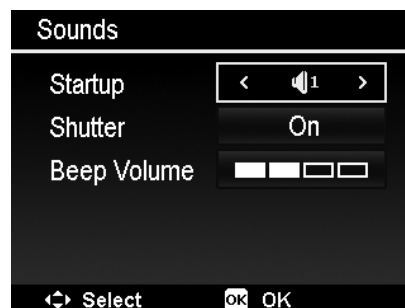
Using the Setup Menu

1. Press **Menu** button to launch the Record/Playback Menu.
2. Use the ◀ or ▶ keys to switch the menu tab to **Setup** menu.
3. Use the ▼ or ▲ keys to move through the menu selections.
4. To select an item, press the **OK** button or ▶ key.
5. Change the submenu settings using the 4-way navigation control.
6. Press the **OK** button to save and apply settings.



Setting Sounds

1. From the Setup menu, select **Sounds**.
2. Adjusts sound settings.
3. Press the **OK** button to apply changes.



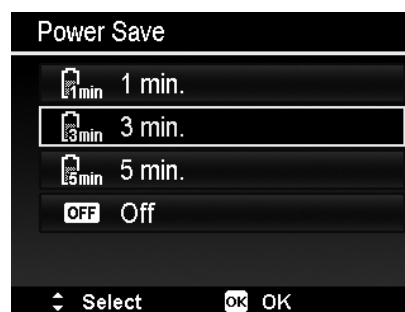
Item	Available Settings	Description
Startup	Sound 1, Sound 2, Sound 3, Off	Selects the startup sound when camera is turned on.
Shutter	On, Off	Enables or disables shutter sound when Shutter button is pressed. Shutter sound is not available when recording videos or voice clips.
Beep volume	0-4	Adjusts volume.

Setting Power Save

The Power Save function allows you to set an idle time after which the camera automatically sets to sleep mode to save power. After a minute of being in sleep mode, the camera eventually turns off power.

This function is not available in the following instances:

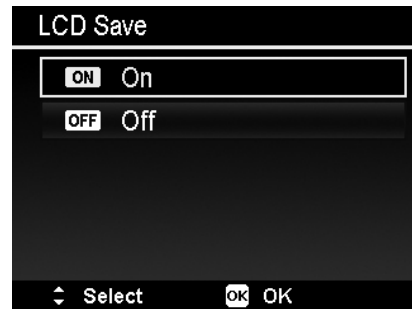
- Recording a video or audio file
- Playing a slideshow/video/audio file
- Using the USB connector



Setting LCD Save

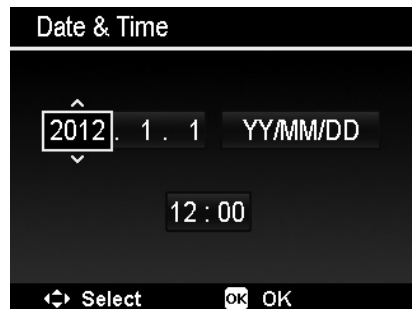
Enable the LCD Save function to automatically decrease the LCD brightness to conserve battery power. When the camera is idle for 20 seconds, the LCD darkens. Press any button to resume to normal brightness.

- The camera is idle and enters LCD Save mode when no buttons are pressed. LCD Save, though enabled, does not function during video playback, slideshow and video recording.



Setting Date & Time

1. Press the navigation controls to adjust date and time value. By holding down the ▼ or ▲ keys, the numeric values changes continuously.
2. Press the **OK** button to apply changes.



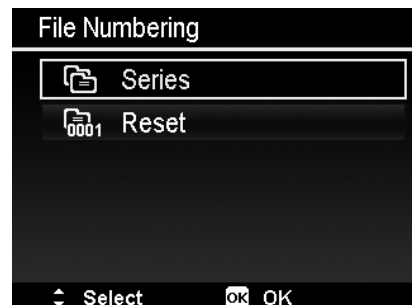
Setting Language

1. Use the navigation control to scroll through the list and select the desired language.
2. Press the **OK** button to confirm and apply settings.



Setting File Numbering

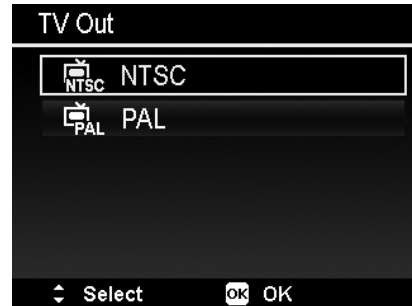
- **Series.** Assigns number to files in sequence even if the folder is changed.
- **Reset.** The file numbering will start from 0001 each time the folder is changed and "Format" is processed.



Setting TV Out

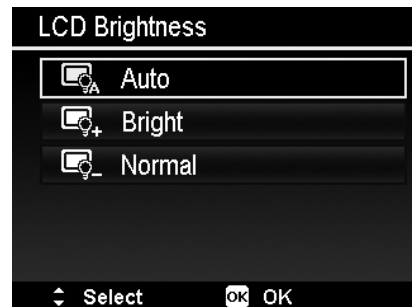
Use the TV Out function to adjust video output signal to accommodate different regional settings. If TV out is not set correctly, the image may not display properly on TV.

- **NTSC.** Applicable in Japan, USA, Canada, Taiwan and others.
- **PAL.** Applicable in Europe, Asia (excluding Taiwan), Oceania and others.



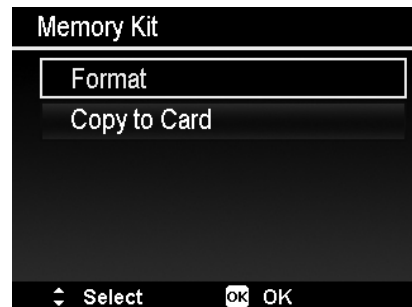
Setting LCD Brightness

- **Auto.** Auto detects the LCD brightness.
- **Bright.** Enhance the LCD brightness.
- **Normal.** Normal LCD brightness.



Setting Memory Kit

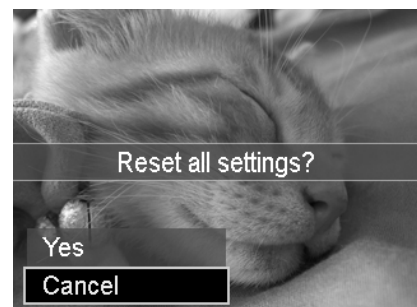
- **Format.** Select to format currently used memory.
- **Copy to Card.** Select to copy all files stored in the internal memory to the memory card.



Reset All

Use this function to reset the camera to its factory settings. However, the following settings are exceptions and not affected by Reset.

- Date & Time
- Language
- TV Out
- Custom White Balance data



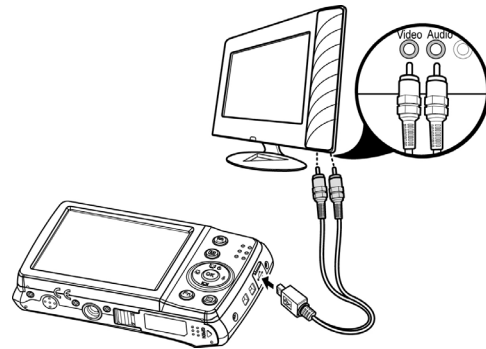
Making Connections

You can connect your camera to: TV, computer, or a printer.

Connecting the Camera to a TV

You can play back your images on a TV screen. Before connecting to any video devices, make sure to select NTSC/PAL to match the broadcast standard of the video equipment you are going to connect to the camera.

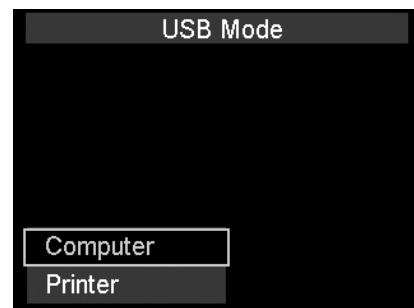
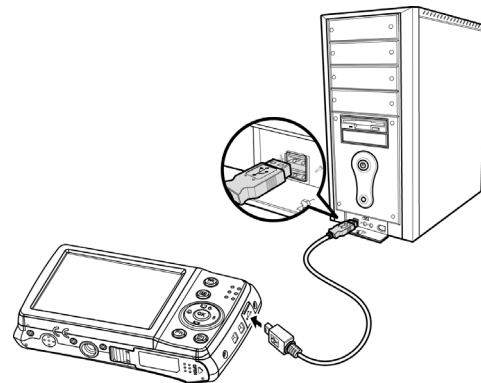
1. Turn on the camera.
2. Set the TV out to match the TV's video out format.
See "Setting TV Out" on page 61.
3. Connect the USB/AV 3-in-1 cable to the USB port on the bottom of your camera.
4. Connect the other end of the cable to the TV's AV input port.
5. The LCD monitor turns black and all images and video clips are displayed on the TV.



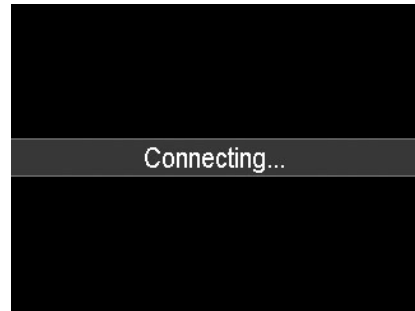
Connecting the Camera to a PC

You can transfer images, videos and audio files to your PC.

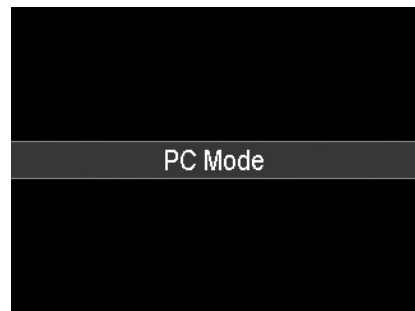
1. Connect one end of the USB cable to an available USB port on your computer
2. Connect the other end of the USB cable to the USB terminal on the camera.
3. Turn on the camera.
4. The USB mode menu appears on the screen. Select **Computer** by using the ▲ or ▼ key and press the **OK** button.



5. The PC starts to detect the connection while the LCD monitor appears **Connecting...**



6. Connection established after **PC MODE** appeared on the LCD monitor

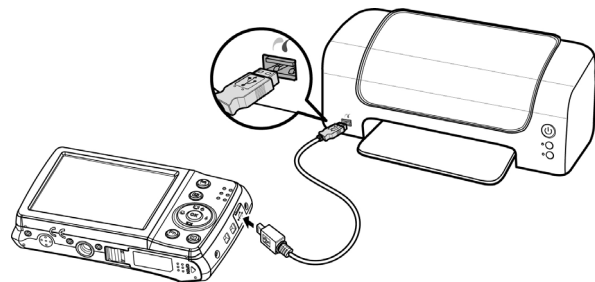


7. Access the files in the camera by your PC.

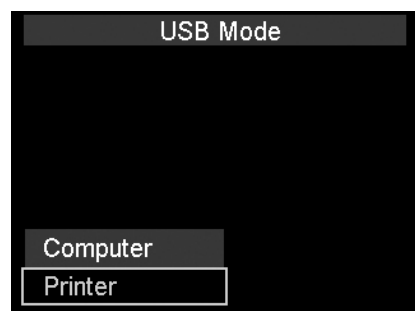
Connecting the Camera to a Printer

You can print your images directly using a **PictBridge compatible** printer.

1. Turn on your Printer. Check that the printer is turned on, there is paper in the printer, and there are no printer error messages.
2. Connect one end of the USB cable to the printer while the other end to USB terminal on the camera.



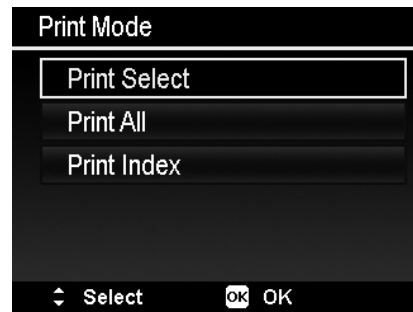
3. The USB mode menu appears on the screen. Select **Printer** by using the **▲** or **▼** key and press the **OK** button.
4. Enter the print mode and print the selected images.



Setting the Print Mode Menu

Print Mode menu appears on the screen after the connection between a printer and your camera is established.

- **Print Select.** An image can then be selected to print.
- **Print All.** Prints all images.
- **Print Index.** Prints all images as thumbnails.



To set Print Select

1. Use the ◀ or ▶ keys to scroll and select an image for printing.
2. Specify the number of copies. Use the ▼ or ▲ key to increase/decrease number.
3. Press the **Function/Delete** button to toggle between turning on/ off the date stamp.
4. Press the **OK** button to enter printer settings.

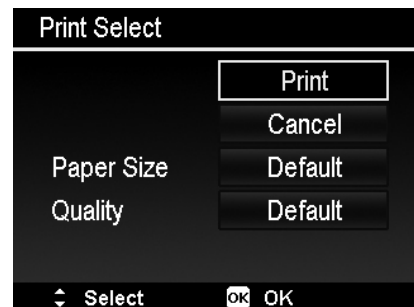


To set Print All and Print Index

Repeat the same steps 2 to 4, then enter printer settings.

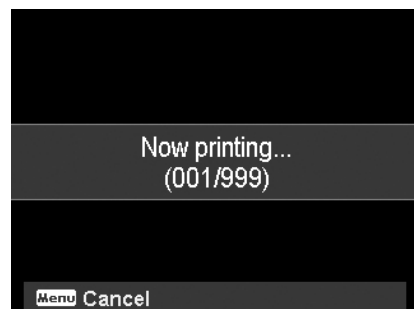
To set Printer Settings

1. Use the ▼ or ▲ key to specify a print option.
2. Modify paper size and quality by the ◀ or ▶ keys.
Available setting:
 - Paper size: Default / A4 / 4"x6"
 - Quality: Default / Fine / Normal
3. Select **Print** on the screen for printing.
Or **Cancel** to go back Print Mode.



Start Printing

- LCD monitor appears "Now printing..."
- Or press Menu button to stop printing anytime.



Troubleshooting and service information

If your camera cannot operate normally, see the frequently encountered problems and solutions listed below. If the problem persists, contact your nearest service center or technical support.

Problem	Cause	Solution
The camera cannot power up.	There is no battery or the battery is not inserted correctly.	Insert the battery correctly.
	The battery has no power.	Replace the battery.
The battery power is draining quickly.	The external temperature is extremely low.	--
	Many shots are being captured in dark places, requiring a flash.	--
The battery or camera is warm.	The camera or flash was used continuously over a long period of time.	--
The flash does not fire or recharge.	The camera flash is turned off.	Set the flash to Auto Flash.
	The light source is sufficient.	--
Even though the flash fired, the image is dark.	The distance to the subject is greater than the flash's effective range.	Get closer to the subject and shoot.
The image is too bright or too dark.	The exposure is excessive or inadequate.	Reset exposure compensation.
I cannot format a memory card.	The memory card is write-protected.	Remove the write protection.
	End of the memory card life.	Insert a new memory card.
I cannot download images from the camera to my computer.	The free space on the hard disk of your computer is insufficient.	Ensure that the hard disk has enough space for running Windows and that the drive for loading image files has free space equal to or greater than the memory card in the camera.
	There is no power being supplied to the camera.	Replace the battery.
The camera does not shoot even when pressing the shutter button.	The battery is running low.	Replace the battery.
	The camera is not in the Capture mode.	Switch to the Capture mode.
	The shutter button was not pressed all the way down.	Press the shutter button all the way down.

	The internal memory or memory card does not have any free space.	Load a new card or delete unwanted files.
	The flash is recharging.	Wait until the flash mode icon, indicated on the screen, stops flashing.
	The camera does not recognize the memory card.	Format the memory card before the initial use or before using with another camera.
I cannot print images with PictBridge-compliant printers.	The camera is connected to the printer when the camera is powered off.	Connect the camera to the printer, turn on the camera, and then select Printer .


Technical support

For technical assistance, free driver updates, product information, and news releases, visit the following web site:

<http://www.BenQ.com>

Specifications

Sensor	14 Mega Pixels, 1/2.3 inch CCD
Zoom	Optical: 5X Digital: 5X
Lens	f = 4.7 (W) ~ 23.5 (T) mm
Focus Range	Normal: W = 15 cm ~ Infinity , T = 60 cm ~ Infinity Super Macro: 2 cm
LCD	2.7" LCD 230k pixels
Image Resolution	<ul style="list-style-type: none"> • Aspect ratio 4:3 - 14M (4320 x 3240), 8M (3264 x 2448), 5M (2592 x 1944), 3M (2048 x 1536), VGA (640 x 480) • Aspect ratio 3:2 - 14M (4320 x 2880), 8M (3264 x 2176), 5M (2592 x 1728), 3M (2048 x 1360), VGA (640 x 424) • Aspect ratio 16:9 - 14M (4320 x 2424), 8M (3264 x 1832), 5M (2592 x 1456), 3M (2048 x 1152), VGA (640 x 360) • Aspect ratio 1:1 - 14M (3744 x 3744), 8M (2832 x 2832), 5M (2240 x 2240), 3M (1728 x 1728), VGA (480 x 480)
Movie Mode	HD 720p (1280 x 720; 16:9), VGA (640 x 480), QVGA (320 x 240), Web (640 x 480) 30 fps Continuous recording with sound
Shutter Speed	1/2000 ~ 1 sec (Fireworks 2 sec.; Night Scene 1/2000 ~ 15 sec.)
White Balance	Auto, Daylight, Cloudy, Tungsten, Fluorescent 1, Fluorescent 2, Custom
Exposure	-2 ~ +2 EV (0.3EV / step)
ISO	Auto / 100 / 200 / 400 / 800 / 1600 / 3200* / 6400* *3200 / 6400 for resolution of 3M and VGA only
Flash	Auto / Auto Anti Red-eye / Forced On / Slow Sync / Forced Off
Drive mode	10 sec. (Self-timer) / 2 sec. (Self-timer) / Double / Burst / Speedy Burst / Off
Power Source	CIPA approximately 200 based on bundled Li-ion battery
Storage Type	Built-in approx. 43 MB SD (up to 4GB) / SDHC (up to 32GB) / SDXC (up to 64GB)
File Format	Still Image: JPEG (EXIF 2.2 compatible); DCF compatible Video: MJPEG Audio: WAV
Dimensions / Weight	99.6 x 57.5 x 22.5 mm 113 g (w/o battery & SD card)
Interface	Digital output: USB 2.0 compatible Audio / Video output (NTSC/PAL) PictBridge compatible

Accessories	USB Cable / Software & User Manual CD / Quick Guide / Hand Strap / Pouch / Li-ion battery / AC power adapter  Available accessories depend on the actual items shipped and may vary from the list above.
-------------	--



All information, designs, and specifications are subject to change without prior notice.